

# Gaston College

Opportunities For Life



2006 - 2008

ACADEMIC  
CATALOG



[www.gaston.edu](http://www.gaston.edu)







# Gaston College

Opportunities For Life

2006-2008 Gaston College Academic Catalog

## I. General Information

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*Martha Robinson*  
*Morris L. Brown*

GENERAL INFORMATION

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## Gaston College Addresses and Phone/Fax Numbers

Gaston College (Main) Dallas Campus 201 Highway 321 South Dallas, NC 28034-1499 704-922-6200 FAX 704-922-2323	Lincoln Campus of Gaston College P.O. Box 600 511 S. Aspen Street Lincolnton, NC 28093 704-748-1040 FAX 704-748-1074	Gaston College East Campus and Textile Technology Center 7220 Wilkinson Blvd Belmont, NC 28012 704-825-3737 FAX 704-825-3775
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### Gaston College Website Address

[www.gaston.edu](http://www.gaston.edu)

### Notification of Nondiscrimination

Gaston College is committed to affirmative action and equal opportunity in employment and education and does not discriminate against current or potential employees or students on the basis of race, color, religion, sex, national origin, age, or disability. Inquiries concerning the college's affirmative action/equal opportunity policy should be directed to the President's Office, Gaston College.

### Right to Change

The Board of Trustees and/or Administration of Gaston College reserves the right to change at any time and without notice graduation requirements, fees and other charges, curriculums, course structure and content, and other such matters as may be within its control, notwithstanding any information set forth in this catalog. Gaston College reserves the right to cancel classes due to insufficient enrollment. Course offerings approved after publication of this catalog are described in class schedules, which are issued each semester.

*2006-2008 tuition rates subject to change pending legislative action and approval.*

### Student Right to Know

The average rate of persistence toward degree completion by students at Gaston College is available in the Student Records Office.

# 2006 - 2008 Academic Calendar

## Summer Semester 2006

May 11-19, 2006	Faculty/Student Break
May 18, 2006	Late Registration
May 22, 2006	First Day of Full/First Session Classes
May 29, 2006	Last Day to Drop with a 75% Refund
June 23, 2006	Last Day of First Summer Session Classes
June 26, 2006	First Day of Second Session
July 4, 2006	College Closed: Holiday
July 3 & 5-7, 2006	Faculty/Student Break
August 4, 2006	Last Day of Class
August 7-16, 2006	Faculty/Student Break
August 17-18, 2006	Student Break

## Fall Semester 2006

August 17, 2006	Late Fall Registration
August 21, 2006	First Day of Fall 2006 Classes
September 1, 2006	Last Day to Drop with a 75% Refund
September 4, 2006	College Closed: Holiday
October 9-10, 2006	Faculty/Student Break
November 22, 2006	Faculty/Student Break
November 23-24, 2006	College Closed: Holiday
December 8, 2006	On Friday Attend Monday Classes
December 11-15, 2006	Final Exam Week
December 15, 2006	Last Day of Class
December 18, 2006	Faculty/Student Break
December 19-29, 2006	College Closed: Holiday
January 1, 2007	College Closed: Holiday

## Spring Semester 2007

January 2-3, 2007	Faculty/Student Break
January 4, 2007	Late Spring Registration
January 4-5, 2007	Student Break
January 8, 2007	First Day of Spring 2007 Classes
January 15, 2007	College Closed: Holiday
January 22, 2007	Last Day to Drop with a 75% Refund
Feb. 26-March 2, 2007	Faculty/Student Break
April 6 & 9, 2007	College Closed: Holiday
April 10, 2007	Faculty/Student Break
May 2, 2007	On Wednesday Attend Monday Classes
May 3-9, 2007	Final Exam Week
May 9, 2007	Last Day of Class
May 10-18, 2007	Faculty/Student Break
May 11, 2007	Graduation

## Summer Semester 2007

May 17, 2007	Late Registration
May 21, 2007	First Day of Full/First Session Classes
May 28, 2007	Last Day to Drop with a 75% Refund
June 22, 2007	Last Day of First Summer Session Classes
June 25, 2007	First Day of Second Session
July 4, 2007	College Closed: Holiday
July 2-3 & 5-6, 2007	Faculty/Student Break
August 3, 2007	Last Day of Class
August 6-15, 2007	Faculty/Student Break
August 16-17, 2007	Student Break



**Fall Semester 2007**

August 16, 2007  
August 20, 2007  
August 31, 2007  
September 3, 2007  
October 8-9, 2007  
November 21, 2007  
November 22-23, 2007  
December 7, 2007  
December 10-14, 2007  
December 14, 2007  
December 17-18, 2007  
December 19, 2007 - January 1, 2008

Late Fall Registration  
First Day of Fall 2007 Classes  
Last Day to Drop with a 75% Refund  
College Closed: Holiday  
Faculty/Student Break  
Faculty/Student Break  
College Closed: Holiday  
On Friday Attend Monday Classes  
Final Exam Week  
Last Day of Class  
Faculty/Student Break  
College Closed: Holiday

**Spring Semester 2008**

January 2, 2008  
January 3, 2008  
January 3-4, 2008  
January 7, 2008  
January 21, 2008  
January 22, 2008  
February 18-19, 2008  
March 21 & 24, 2008  
March 25 -28, 2008  
April 30, 2008  
May 1-7, 2008  
May 7, 2008  
May 8-16, 2008  
May 9, 2008

Faculty/Student Break  
Late Spring Registration  
Student Break  
First Day of Spring 2008 Classes  
College Closed: Holiday  
Last Day to Drop with a 75% Refund  
Faculty/Student Break  
College Closed: Holiday  
Faculty/Student Break  
On Wednesday Attend Monday Classes  
Final Exam Week  
Last Day of Class  
Faculty/Student Break  
Graduation

**Summer Semester 2008**

May 15, 2008  
May 19, 2008  
May 26, 2008  
June 20, 2008  
June 23, 2008  
June 30- July 3, 2008  
July 4, 2008  
August 1, 2008  
August 4-13, 2008  
August 14-15, 2008

Late Registration  
First Day of Full/First Session Classes  
Last Day to Drop with a 75% Refund  
Last Day of First Summer Session Classes  
First Day of Second Session  
Faculty/Student Break  
College Closed: Holiday  
Last Day of Class  
Faculty/Student Break  
Student Break

## **VISION FOR THE FUTURE OUR FIVE-YEAR FOCUS: 2003-2008**

Our “Vision for Gaston College 2003-2008” builds on the accomplishments of the past and sets bold new directions. The strategic initiatives of the plan focus on five top priority areas:

- Serving the lifelong learning needs of a diverse population
- Providing proactive leadership in economic development
- Providing excellent student-centered services
- Providing essential resources to support quality educational programs
- Enhancing communication

### **Mission Statement**

Gaston College, located in Gaston and Lincoln Counties, is an open door, comprehensive, public community college that promotes lifelong learning and economic development through high quality educational programs and services.

### **Vision Statement**

Gaston College will be recognized as the college of choice for providing excellent student-centered programs and services and for providing proactive leadership in economic development that enriches the quality of life for the greater community.

#### **STRATEGIC INITIATIVE I:**

**SERVE THE LIFELONG LEARNING NEEDS OF A DIVERSE POPULATION**

#### **STRATEGIC INITIATIVE II:**

**PROVIDE PROACTIVE LEADERSHIP IN ECONOMIC DEVELOPMENT**

#### **STRATEGIC INITIATIVE III:**

**PROVIDE EXCELLENT STUDENT-CENTERED SERVICES**

#### **STRATEGIC INITIATIVE IV:**

**PROVIDE THE ESSENTIAL RESOURCES TO SUPPORT  
QUALITY EDUCATIONAL PROGRAMS**

#### **STRATEGIC INITIATIVE V:**

**ENHANCE COMMUNICATION**



## ABOUT THE COLLEGE

Gaston College was granted a charter by the State of North Carolina in 1963 and began its first classes in temporary headquarters in September 1964. The college moved to its permanent campus on Highway 321 between Dallas and Gastonia two months later. Serving both Gaston and Lincoln counties, Gaston College enrolls over 5,000 students each term in curriculum programs and averages over 16,000 students annually in its Continuing Education programs. Part of the North Carolina Community College System, Gaston College is accredited by the Southern Association of Colleges and Schools to award associate degrees.

### Dallas Campus

The twelve major buildings that comprise the Gaston College Dallas campus contain approximately 450,868 square feet and have an estimated current value of \$41,385,862. There is an efficient road system and parking for more than 2,000 cars. College facilities (including a 480-seat auditorium) are available for public use and may be scheduled through the Office for Finance and Facilities. Gaston College is a commuter institution and does not have dormitories or housing for rent.

### Lincoln Campus

The Lincoln Center of Gaston College was opened in August 1969. In 1987, it was relocated to the Lincoln County School of Technology at 1 Timken Drive in Lincolnton. The former Lincolnton High School of 511 S. Aspen Street was renovated by Gaston College to become the current Lincoln Campus location. Classes were first held at Lincoln Campus, in spring semester 1999.

### East Campus and Textile Technology Center

The North Carolina Vocational Textile School was approved in 1941 and began operation in 1943 in Belmont. It was later renamed the North Carolina Center for Applied Textile Technology. In 2005, the Center was transferred to Gaston College and became the East Campus and Textile Technology Center. The Textile Technology Center does new and sample product development, product testing, training, and consulting for the textile industry. Currently numerous continuing education classes and a few curriculum classes are being offered at the campus. Harney Hall was built in 1943 and has 49,000 square feet. The Classroom Building was built in 2003 and has 26,000 square feet and houses a 150-seat auditorium. The site contains 17.8 acres and has 170 parking spaces.

### Regional Emergency Services Training Center

The Regional Emergency Services Training Center is a five-story training facility used by fire, police, and emergency medical service organizations. On the surrounding grounds, there are nine propane and flammable liquid pits. The center gives Gaston College the opportunity to offer specialized training previously unavailable in our region.

## GASTON COLLEGE ADMINISTRATION

Dr. Patricia Skinner, President

Dr. Don Ammons, Vice President for Academic Affairs

Dr. Carrietta Adkins, Vice President for Student Services

Mr. Ralph Huddin, Vice President for Finance and Operations

Dr. Linda Greer, Vice President for Economic and Workforce Development

## GASTON COLLEGE BOARD OF TRUSTEES

### Officers:

Mr. Randy Vinson, Chair

Mr. Don Ballard, Vice Chair

Ms. Ann Neal, Secretary

Mr. Steve Campbell

Maj. Alan Cloninger

Mr. Hugh B. Grant

Mr. Wayne C. Lowe

Ms. Rhonda McLean

Dr. Stephanie Rauch

Mr. Jerry Richardson

Mr. James Smith

Ms. Barbara Voorhees

Mr. Don Warren

Dr. Floyd Wright

Mr. Ivies Bustamante, Student Government Association President

## GASTON COLLEGE FOUNDATION, INC. BOARD OF DIRECTORS

### Officers:

Mr. Tom Efird, President

Mr. Don Warren, Vice President

Mr. Ralph Huddin, Treasurer

Dr. Patricia Skinner, Secretary

Mr. Don Ballard

Mr. Joe Carpenter

Ms. Rhonda McLean

Ms. Barbara Myers Cozort

Ms. Ann Neal

Mr. Robert Tull

Mr. Randy Vinson

Ms. Sylvia Bajorek, Executive Director



# ACCREDITATIONS AND MEMBERSHIPS

Gaston College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS 1866 Southern Lane, Decatur, Georgia 30033-4097, 404-679-4501 to award associate degrees.

Four engineering technology curricula are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc. ABET is recognized by the National Commission of Accrediting as the appropriate accrediting agency for the accreditation of engineering technology curricula.

• The Associate Degree Nursing and Practical Nursing Programs are approved by the North Carolina Board of Nursing. • The Dietary Managers Program received accreditation in December 1999 by the Dietary Managers Association. • The Dietetic Technician Program received Developmental Accreditation April 20, 2001 from the Commission on Accreditation for Dietetic Education (CADE). CADE is the accrediting agency for the American Dietetic Association (ADA). • The Department for EMS Education is accredited and fully approved by the North Carolina Office of EMS as and Advanced EMS Education Institution and demonstrated that it meets and exceeds all criteria and standards to provide EMS programs as defined by the North Carolina Medical Care Commission. • The Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Committee on Accreditation for Medical Assistant Education, also known as The Curriculum Review Board of the American Association of Medical Assistants' Endowment (AAMAE). • The Nursing Assistant I class is approved by the North Carolina Division of Facility Services, and the Nursing Assistant II class is approved by the North Carolina Board of Nursing. • The Therapeutic Massage Program is approved by the North Carolina Board of Massage and Bodywork Therapy. • The Veterinary Medical Technology Program has full accreditation status with the CVTEA (Committee on Veterinary Technician Education and Activities) since 1997.

The following organizations are among those in which the college holds institutional memberships:

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>Air Conditioning Contractors of America</li> <li>Accreditation Board for Engineering and Technology, Inc.</li> <li>TAC of ABET</li> <li>111 Market Place, Suite 1050</li> <li>Baltimore, MD 21202</li> <li>Telephone (410) 347-7700</li> <li>American Association of Collegiate Registrars and Admissions Officers</li> <li>American Association of Community Colleges</li> <li>American Library Association</li> <li>American Society for Engineering Education</li> <li>Association of College Administration Professionals</li> <li>Association of Community College Business Officers</li> <li>Association of Community College Trustees</li> <li>Charlotte Area Educational Consortium</li> <li>College Stores Association of North Carolina</li> <li>Cooperative Education Association, Inc.</li> <li>Gaston County Chamber of Commerce</li> <li>National Association of College Auxiliary Services</li> <li>National Association of College Stores</li> <li>National Association of College and University</li> </ul> | <ul style="list-style-type: none"> <li>Business Officers</li> <li>National Association for Foreign Student Affairs</li> <li>National Council on Black American Affairs/AACC</li> <li>National Council for Marketing and Public Relations</li> <li>North Carolina Association of Colleges and Universities</li> <li>North Carolina Association of Community College Presidents</li> <li>North Carolina Association of Community College Trustees</li> <li>North Carolina Citizens for Business and Industry</li> <li>North Carolina Cooperative Education Association</li> <li>Piedmont Area Educational Consortium</li> <li>Southern Association of College and University Business Officers</li> <li>Southern Association of Colleges and Schools</li> <li>Southern Association of Community, Junior and Technical Colleges</li> </ul> |
|---|---|

# PERFORMANCE MEASURES RESULTS FOR COLLEGE YEARS 2003-2004 (Data Reported 2005)

MEASURE:	<b>1. Progress of basic skills students (1)</b>
STANDARD:	75% of basic skills students will show progress.
2003-2004 RESULTS:	78% showed progress.
IN COMPLIANCE:	Yes
MEASURE:	<b>2. Pass rate on licensure/certification exams (1)</b>
STANDARD:	80% aggregate pass rate;
2003-2004 RESULTS:	No exam with pass rate less than 70% 90% pass rate
IN COMPLIANCE:	All exams had pass rates greater than 70%. Yes
MEASURE:	<b>3. Goal completion for program completers (1)</b>
STANDARD:	At least 95% of program completers will achieve their goal.
2003-2004 RESULTS:	100% achieved their goal.
IN COMPLIANCE:	Yes
MEASURE:	<b>4. Employment status of graduates (1)</b>
STANDARD:	95% of completers will be employed within one year of graduation.
2003-2004 RESULTS:	99.7% were employed.
IN COMPLIANCE:	Yes
MEASURE:	<b>5. Performance of College Transfer Students (1)</b>
STANDARD:	85.9% of associate degree recipients will have a GPA of 2.0 or more after 2 semesters.
2003-2004 RESULTS:	87.5% had a GPA of 2.0 or more after two semesters.
IN COMPLIANCE:	Yes
MEASURE:	<b>6. Passing rates of students in Developmental courses (2)</b>
STANDARD:	70% of students who complete a developmental course will pass (will have a grade of "C" or better).
2003-2004 RESULTS:	77% had a grade of "C" or better.
IN COMPLIANCE:	Yes
MEASURE:	<b>7. Success of developmental students in subsequent college-level courses compared to non-developmental students.</b>
STANDARD:	There will be no significant difference in the performance of developmental & non-developmental students in subsequent college-level courses.
2003-2004 RESULTS:	No significant difference.
IN COMPLIANCE:	88% of both groups passed subsequent courses. Yes
MEASURE:	<b>8. Satisfaction of program completers and noncompleters.</b>
STANDARD:	90% of combined completers & noncompleters will be satisfied with programs and services.
2003-2004 RESULTS:	96% were satisfied with programs and services.
IN COMPLIANCE:	(NCCCS calculates the exact % based on follow-up data we send.) Yes
MEASURE:	<b>9. Curriculum student retention and graduation</b>
STANDARD:	60% of fall cohort will either complete their program or re-enroll in the following fall.
2003-2004 RESULTS:	65% either completed or re-enrolled.
IN COMPLIANCE:	Yes
MEASURE:	<b>10. Employer satisfaction</b>
STANDARD:	85% of employers will express satisfaction with employees.
2003-2004 RESULTS:	94% expressed satisfaction.
IN COMPLIANCE:	Yes
MEASURE:	<b>11. Client satisfaction with customized training</b>
STANDARD:	90% of businesses/industries will report satisfaction with services provided by Gaston College.
2003-2004 RESULTS:	100% expressed satisfaction.
IN COMPLIANCE:	Yes
MEASURE:	<b>12. Enrollment</b>
STANDARD:	3 year average of 10 students in each program.
2003-2004 RESULTS:	No program with less than 3-year average of 10.
IN COMPLIANCE:	Yes





# Gaston College

## Opportunities For Life

2006-2008 Gaston College Academic Catalog

## II. Admissions

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ADMISSIONS

## **GENERAL ADMISSION REQUIREMENTS (for Curriculum Programs)**

Gaston College subscribes to the open door admission policy. High school graduation or the equivalent is required of all applicants for degree programs. Applicants must be 18 years of age and possess a high school diploma or equivalent, unless they are dual enrollment students or Huskins students. Although restrictive standards for admission are not imposed, admission to the college does not guarantee immediate admission to the degree program desired by the applicant. Admission to certain programs may be affected by special program requirements.

### **Associate Degree / Diploma / Certificate Programs**

For all programs, the following steps must be completed before students are admitted.

1. Submit to the Admissions Office a completed Application for Admission.
2. Request that your high school mail an official high school transcript to the Admissions Office at Gaston College, 201 Highway 321 S., Dallas, NC 28034-1499. The documentation listed below can be submitted in the place of a traditional high school transcript:
  - Official Adult High School transcript
  - Official GED scores
  - Official transcript from International Correspondence School
  - Official transcript from Home School
  - Official transcript from a regionally accredited college or university reflecting an Associate Degree or higher
3. Request that all colleges from where credit was received submit official transcripts.
4. Schedule and take the placement test. The college placement test evaluates skills in reading, writing, and math. The placement test may not be required of any person who has scored 500 on the verbal or critical reading section and 520 on the math section of the SAT or who has scored 21 on the English section and 21 on the math section of the ACT. (All test scores must be less than five years old.) A transfer student who has earned a "C" in both college level math and college level English from a regionally accredited institution shall have the test waived.
5. Attend a New Student Orientation session.

Applicants are strongly encouraged to submit a Gaston College Application for Admission at least six weeks prior to enrolling to ensure that their information is processed. Though applicants may enroll for one semester without submitting transcripts and test scores, this information facilitates advising and smooth registration. Applicants must all meet all admission requirements before enrolling for the second semester. Applicants who decide to enroll during a later semester are responsible for contacting the Admissions Office to ensure their start semester is updated.



## **Transferring from Another College**

Applicants transferring to Gaston College must submit an Application for Admission and meet all requirements for general admission.

## **Selective Programs**

Admission to the general college does not guarantee admission to selective programs. Please follow the guidelines established by the program departments in addition to the general admission requirements. Applicants are accepted in a pending status, for certain selective programs, until accepted in the program.

## **Special Student Admission (Non-degree Applicants)**

Students who wish to register for credit courses, as Special Studies Students, may earn a maximum of 15 hours before declaring a major curriculum and may be admitted to credit classes with an advisor's approval. Tuition and fees are the same as for regular curriculum students. Credits earned under Special Studies status may be applied to a degree, diploma or certificate program by making a formal request of curriculum status change in the Office of the Registrar. Such a request must be made on or before completion of 15 credit hours and the student must meet the regular admissions requirements for the curriculum as stated previously. Applicants who are unable to complete their admission files, may present their case to the Director of Admissions to request that a temporary exception be made. (The Director of Admissions will grant temporary exceptions on a case-by-case basis).

## **Re-Admission**

Students who have not registered for a two-year period, may be required to re-apply and meet current admissions requirements.

## **Non-Graduates**

Non-graduates from high school may apply for certain certificate and diploma programs in the Trade and Industrial Division. They must take the college's placement test. Non-graduates interested in other classes may register for only two classes as special non-degree seeking students. Certain classes may be restricted.

## **International Students**

International students must meet all admission requirements listed under General Admission Requirements. All applicants must submit (along with an application) an official or certified copy of their high school transcript and an official/certified copy of any college work completed. If the original copies of these transcripts are in a language other than English, an official English translation is required. The translation must be by a certified translator. Students whose foreign transcripts can not be evaluated by college personnel are responsible for providing a transcript evaluation from a recognized American transcript evaluation agency. Proof of English proficiency is required. This may be established by making a minimum score of 540 (207 on the computer) on the Test of English as a Foreign Language (TOEFL). The TOEFL is published and administered in most countries by the Educational Testing Service,

P. O. Box 899, Princeton, New Jersey, 08541, USA. Applicants must present evidence of adequate financial resources for F-1 visa status. Form I-134 (Affidavit of Support) is used in most instances. However, Gaston College's Financial Certificate will be presented to each applicant for completion. All F-1 students must carry a full course of study and pay out-of-state tuition rates.

There are no scholarships or other types of financial aid available for students from abroad. An F-1 student may accept off-campus employment only if the U.S. Citizenship and Immigration Services (USCIS) has granted prior approval.

Gaston College is a commuter institution and does not have dormitories or housing for rent. Students must find their own housing in the neighboring towns. Transportation to the college must be arranged by the student.

The International Student Advisor (ISA) assists international students with personal problems, adjustment to customs and procedures of American higher education, visas, government regulations, and academic advisement. The International Student Advisor is the student's chief contact. The student is responsible for reporting to the ISA as soon as he or she arrives and must report to this advisor for the duration of his or her stay.

ALL APPLICANTS MUST HAVE COMPLETED THESE REQUIREMENTS AT LEAST SIX WEEKS PRIOR TO THE SEMESTER FOR WHICH THEY ARE SEEKING ADMISSION.

Resident aliens, permanent residents, naturalized citizens, and applicants with other visa status must present these documents when applying. Undocumented immigrants may apply and enroll in classes at the out-of-state tuition rate.



## Huskins Program

(College Gateway)

The Gaston College Huskins Program offers qualified juniors and seniors in Gaston and Lincoln Counties the opportunity to take college courses tuition free during their high school day. The legislation in North Carolina that provides this opportunity is called the Huskins Bill. Students taking Huskins courses are eligible to earn both high school credit and community college credit.

Prior to registering for a Huskins course, a student must be approved by the high school principal. Criteria used by the principal include attendance in high school courses, maturity, and grades. For transferable courses, an overall "B" average is recommended; for career technical courses, an overall "C" average is recommended.

All Huskins students are required to take a placement test to determine course eligibility for enrollment in a college credit course. The ASSET and COMPASS tests are administered by Gaston College and are used to evaluate a student's readiness for college level work. The placement test can be waived for students who have scored 500 or higher on the verbal or critical reading section and 520 or higher on the math section of the SAT, or 21 or higher on the math and 21 or higher on the English portion of the ACT. The placement test is free and can be scheduled through the high school counselor (ASSET), or by calling the Admissions Office of Gaston College (COMPASS).

Additionally, students must submit a completed Application for Admission before being admitted to Gaston College, and all students must meet all academic prerequisites to enroll in a college course.

Courses are taught in various locations including the high schools and on both the Dallas and Lincoln Campuses of Gaston College. Check with your high school counselor for details on specific courses offered at your high school. Transfer courses receive honors credit.

Additionally, any grade of "C" or higher on college transfer courses will be accepted by all North Carolina Public Universities and many other in-state and out-of-state colleges following the North Carolina Comprehensive Articulation Agreement.

Huskins courses are college level courses and will require outside reading and study time. The courses are taught as college level courses and some content is calibrated for a college-age audience. Students will be held responsible for course work covered on days they are absent.

## Dual Enrollment Program

Upon the approval of their high school principal, high school juniors and seniors may be admitted as special dual enrollment students to appropriate credit and/or non-credit courses. Dual enrollment students must be at least 16 years of age and have completed 10th-grade English. Applicants are admitted on a space available basis into regular classes at the college.

Applicants must be enrolled at least half time at the high school and be making progress toward graduation. In the case of courses offered in the summer, the principal must certify that a student was enrolled at least half time in high school courses during the preceding semester and made appropriate progress toward graduation. High school seniors who will graduate in May are not eligible to enroll in summer courses as dual enrollment students.

All dual enrollment students are required to take the college placement test to determine eligibility to enroll in a college credit course. The college placement test evaluates skills in reading, writing and math. Dual enrollment students who have scored 500 on the verbal or critical reading section and 520 on the math section of the SAT, or who have scored 21 on the English section and 21 on the math section of the ACT are not required to take the college placement test. All course prerequisites apply to dual enrollment students.

Students must obtain a Dual Enrollment Form from their counselor and complete a Gaston College Application for Admission. The Dual Enrollment Form must be completed and all appropriate high school signatures must be obtained before registration. Students must submit the Application, the Dual Enrollment Form, and test scores, to the Admissions Office during the late registration period. Required Gaston College signatures will be obtained at the time of registration.

Dual enrollment students are allowed to take only two courses per semester (not including labs) and are not allowed to take courses that are taught in the high school. Dual enrollment students are not permitted to enroll in developmental courses or courses in selective curriculum programs such as: Dietetic Technician, Emergency Medical Science, Medical Assisting, Medical Transcription, Nursing, Phlebotomy, Therapeutic Massage and Veterinary Medical Technology.



## RESIDENCY

Gaston College is supported by the taxpayers of North Carolina and Gaston and Lincoln counties. Students who are not state residents pay out-of-state tuition. A student's official residency status is determined at the time of registration according to the residency policy of the state of North Carolina, the North Carolina Community College System, and the Gaston College Board of Trustees. In order for a student to be considered a legal resident for tuition purposes, the applicant's residency must be established and maintained in North Carolina for at least twelve months preceding the date of first enrollment in an institution of higher education in this state. Immigrants lawfully admitted to the United States for permanent residence may establish North Carolina residence in the same manner as any other non-resident. Undocumented immigrants are charged the out-of-state tuition rate.

The legal residence of a person under 18 years of age is that of his or her parents, surviving parent, or legal guardian. In cases where parents are divorced or legally separated, the minor's domicile is deemed to be North Carolina for the time period that either parent, as a North Carolina legal resident, claims the minor as a tax dependent.

A change of address does not automatically entitle a student to pay the same instructional fees as a North Carolina resident. A request to change one's residency status must be submitted to the Admissions Office prior to registration. More information on residency requirements may be obtained from the Admissions Office.

### Change of Address

Change of address should be submitted in writing to the Registrar's Office to ensure receipt of grades and general information.

## ADMISSION REQUIREMENTS FOR ECONOMIC AND WORKFORCE DEVELOPMENT (CONTINUING EDUCATION) PROGRAMS

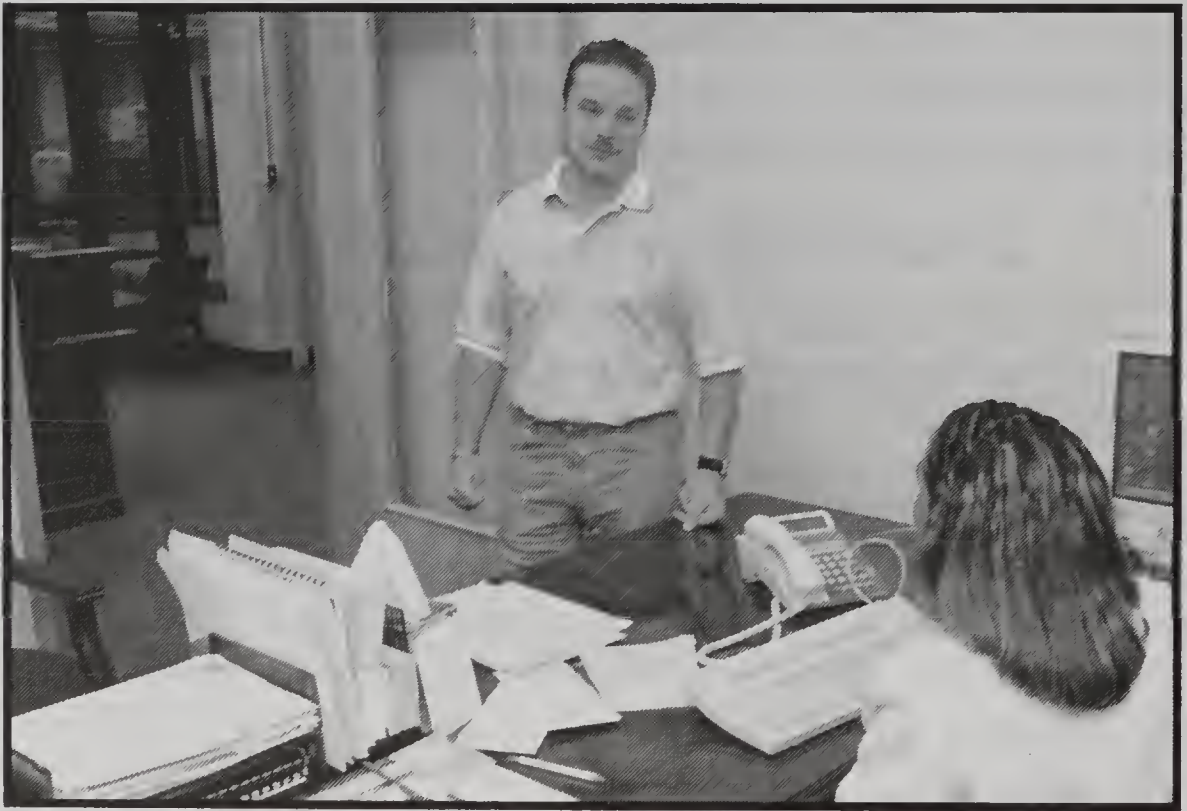
The application and registration process for Economic and Workforce Development (non-credit) programs is completed at the first class meeting. Some classes may require pre-payment or pre-registration to assure a place in class. A special form is used for Economic and Workforce Development students. Refer to brochures and marketing information for details.

Economic and Workforce Development courses do not require an application for admission to the general college.

North Carolina residents 65 or older do not pay registration or other fees, except for self-supporting classes.

The same age restrictions for curriculum (credit) students apply to Economic and Workforce Development students and dual enrollment students.

# ADMISSIONS







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# COST OF ATTENDING GASTON COLLEGE

Gaston College, supported by the taxpayers of North Carolina and Gaston and Lincoln counties, maintains modest instructional and general fees that are subject to change by action of the state of North Carolina and the Board of Trustees of Gaston College.

*Tuition rates subject to change pending legislative action and approval.*

## Curriculum Courses

### Instructional Fee Per Semester Hour of Credit

North Carolina Residents	Out-of-State Residents
\$39.50	\$219.50

The maximum instructional fee for residents of North Carolina is \$632.00 per semester for 16 or more credit hours. The maximum instructional fee for out-of-state residents is \$3,512.00 per semester for 16 or more credit hours.

## Economic and Workforce Development (Continuing Education) Courses

There is a sliding scale for state-supported occupational extension courses ranging from \$50 for up to ten instructional hours to \$65 for 101 hours and above. Practical skills and special interest courses vary in cost. Economic and Workforce Development students pay no activity fee; however the current usage fee applies for classes that meet any of our three campuses five or more times.

## Exceptions

Dual enrollment students pay no tuition, except for summer self-supporting classes and Economic and Workforce Development classes. However, they do pay all other fees.

North Carolina residents 65 or older do not pay registration or other fees, except for self-supporting classes.

## OTHER GENERAL FEES

### Student Activity Fee:

\$1.50 per semester hour of credit

The maximum semester student activity fee is \$12 for 8 or more credit hours for in-state and out- of-state residents. A Student Activity Fee is not charged for the summer term.

Some courses may require an additional supply fee. Courses requiring additional fees will be identified in the class schedule.



**Usage Fee:** \$12 per semester (\$10 during summer term)

**Curriculum Graduation Fee:** \$45

**Lab Fee:** \$6 per lab hour  
 The maximum lab fee is \$48 per semester for in-state and out-of-state residents.

**Malpractice Insurance:** \$13 per year. Individuals enrolled in nursing and health services programs are required to pay an annual malpractice premium.

**Transcript Fee:** \$5 for each transcript.

**Technology Fee:** \$1 per credit hour up to 16 credits.

**Returned Checks**

A fee of \$20 will be assessed to any student whose check is returned.

**Right to Change Fees**

All college fees are subject to change without notice.

**Refunds**

**Curriculum Programs**

A 100% refund of tuition and fees may be given if you officially drop prior to the first day of the semester. A 75% refund of tuition may be given if you officially drop a class or classes prior to the published drop date. Fees are not refundable once the semester begins. All paperwork for the drop must be processed before the drop date. The drop date is published each semester in the Register as well as the Gaston College calendar. If a course fails to materialize, refunds are automatically processed.

(The refund policy is subject to change. Refunds of tuition will be issued in accordance with the current state and college policy.) Refund checks will be mailed within six weeks of the last drop-add day.

**Economic and Workforce Development (Continuing Education) Courses**

If a student officially withdraws from a class prior to the first class meeting, a full refund will be given. A 75% refund will be given if a student officially withdraws before the 10% point of the class. A full refund is given for classes cancelled by the college because of insufficient enrollments. Fees for self-supporting courses will not be refunded unless the college cancels the course.

## Accident Insurance

Gaston College does not have insurance to cover students if they are injured on the Gaston College campus or in a college-related activity. It is advisable, therefore, that students, especially those in areas that could be considered to be potentially hazardous, make certain they have appropriate coverage under a personal accident policy or that of a parent.

For those who find they do not have accident insurance coverage, information on a student insurance program is available from the Business Office in the Administration Building.





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# FINANCIAL AID

## General Information

Financial assistance is available for curriculum students in the form of scholarships, grants, loans, and work programs. Every effort is made by the institution to help students who need assistance. Financial aid is intended to supplement, not replace, financial contributions from the student and his or her family.

There are three types of financial aid: gift assistance, student loans, and work. Gift assistance includes grants and scholarships that do not have to be repaid. Loans and work are self-help programs. Loans are usually paid back after enrollment is terminated. Work enables students to pay part of their expenses through their own earnings.

## How Eligibility is Determined

Gaston College uses the Free Application for Federal Student Aid (FAFSA) to assess the financial condition of financial aid applicants. Information entered onto the FAFSA is analyzed according to the requirements of the U.S. Congress and federal guidelines. This ensures that all applicants are treated fairly and equitably. Such items as income, assets, family size, marital status, and number of family members in the household in college are used to determine eligibility.

Results of the FAFSA indicate the amount the student and his or her family can contribute toward the student's education. Most financial aid is based on need rather than on scholastic record. Financial need is the difference between the total education expenses and what the family is expected to contribute.

## How to Apply for Financial Aid

Students who are entering Gaston College and are in need of financial aid are requested to follow this application procedure:

1. After the application for admission has been submitted, the student should complete a Free Application for Federal Student Aid (FAFSA).
2. The student who wishes to apply for financial assistance must file a Free Application for Federal Student Aid (FAFSA). The FAFSA is available at local high schools, the Lincoln Center, and the Financial Aid Office on the main campus. Whenever possible, the student should complete the form on the Internet at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). It takes 4 – 6 weeks to process a complete file. Therefore, students should submit all financial aid forms several weeks prior to their enrollment date.
3. In addition, the student should submit other documentation if requested by our office. Additional documentation includes the Gaston College Financial Aid Application, the Verification Form, and other financial information.



4. Students interested in scholarships, loans, and/or work-study should submit a separate Gaston College Foundation Scholarship Application, Work-Study Application and/or Loan Application.
5. Students will be notified of their financial aid eligibility by award letter. The letter will state the type and amount of award. Students accepting their awards should check the appropriate column on the award notification letter, sign one copy and return it to the Financial Aid Office

Applicants may apply for a grant, scholarship, loan, work-study, or any combination of these. The total combined sum of these must not exceed total financial need. The awarding of aid is based on funds available.

In the event that a student receiving aid withdraws from the institution, the student will be responsible for repayment of a prorated amount of any portion of payments that were extended to the student for living expenses and that would no longer be attributed to meeting expenses related to attendance.

The student has the obligation to maintain “Financial Aid Satisfactory Academic Progress Standards” as defined specifically for financial aid recipients. (A copy of the Financial Aid Satisfactory Academic Progress Standards is available in the Financial Aid Office.) Failure to maintain financial aid satisfactory academic progress will result in the loss of eligibility for financial aid. Eligibility may be regained, unless the student has exceeded his or her eligibility to receive federal aid. Student coursework must be restricted to the major that is on file in the Office of the Registrar. Courses taken outside of the approved major may require adjustment to the financial aid award. Students are responsible for payment of repeated courses that were previously paid for by financial aid.

**It is the student's responsibility to:** (related to Financial Aid)

- Review and consider all information about the school's programs before enrolling.
- Complete all application forms accurately and submit them on time to the right place.
- Pay special attention to and accurately complete the application for Financial Aid. Errors can result in long delays in receiving aid. Intentional mis-reporting of information on application forms for federal financial aid is a violation of the law and is considered a criminal offense subject to penalties under the US Criminal Code.
- Return all additional documentation, verification, corrections, and new information to the Financial Aid Office.
- Read and understand all forms before signing them and keep copies of all forms.
- Notify the lender of loans of changes in name, address, and school status.
- Perform the work that is agreed upon in accepting a college work-study award.

- Know and comply with the deadlines (both U.S. Department of Education and Gaston College) for application or reapplication for aid.
- Contact the Financial Aid Office before withdrawing from school or changing course schedule.
- Notify the Financial Aid Office in writing about additional income not reported on aid application.
- Express written appreciation to any scholarship donor.
- Understand and maintain Financial Aid Satisfactory Academic Progress Standards in order to continue to receive financial aid. Students are not considered to be making satisfactory academic progress if they do not maintain at least a 2.0 GPA each semester.

## FEDERALLY SUPPORTED PROGRAMS

### Eligibility

Students must meet the following requirements before they can receive federal financial aid funds:

1. have financial need, except for some loan programs;
2. have a high school diploma, a General Education Development (GED) certificate, or a passing mark on an independently administered test approved by the U.S. Department of Education or meet other standards that are approved by the U.S. Department of Education;
3. be enrolled as a regular student working toward a degree, diploma, or approved certificate in an eligible program. (Students may not receive aid for correspondence or telecommunications courses unless they are part of an associate, bachelor, or graduate degree program.);
4. be a U.S. citizen or eligible noncitizen;
5. have a valid Social Security Number;
6. make satisfactory academic progress;
7. sign a statement of educational purpose/certification statement on refunds and default (found on the Student Aid Report);
8. sign a statement of updated information, if required (found on the Student Aid Report); and
9. register with the Selective Services, if required.

### Federal Pell Grant

The Federal Pell Grant program is designed to provide financial assistance to those who need it. The amount of the Federal Pell Grant is determined on the basis of the student's and his or her family's financial resources and the expected family contribution.

The Federal Pell Grant Award is a grant and, unlike a loan, does not have to be repaid as long as the student attends their classes through the 60 percent point of the term and maintains Financial Aid Satisfactory Academic Progress Standards. Every student who is applying for financial aid at Gaston College must apply for the Federal



Pell Grant. Applications may be obtained at area high schools or from the Financial Aid Office. Whenever possible, the student should complete the form on the Internet at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Please include Gaston College's Title IV school code #002973 on your application which will enable the U.S. Department of Education to provide your Student Aid Report (SAR) to our institution.

### **Federal Supplemental Educational Opportunity Grant (FSEOG)**

This program of direct grants of financial aid is for undergraduate students of exceptional financial need who without the grants would be unable to continue their education.

### **College Foundation Student Loan Program**

Gaston College participates in the student loan program through College Foundation of North Carolina (CFNC). Students interested in applying for a loan must first submit a Free Application for Federal Student Aid (FAFSA) for the assessment of his or her financial condition. Student loan eligibility is contingent upon a passing credit report as determined by the College Foundation. Payments begin six months after the student graduates or leaves school. Loan applications are available in the Financial Aid Office.

Student loans are available in three categories:

- Subsidized Loan – Need Based. Available to dependent and independent students.
- Unsubsidized Loan – Non-need Based. Available to independent students only.
- PLUS Loan – Parent Loan. Available to parents of dependent students with no need.

### **Federal College Work-Study Program (Federal/Institutional)**

Gaston College participates in the college work-study program, which provides on campus work opportunities for students needing financial assistance to attend school. Work is available in the library, faculty offices, administrative offices, laboratories, shops, and building and ground maintenance. Students working under this program are paid monthly for the work performed. In arranging a job and determining how many hours a week a student may work under this program, the Financial Aid Office will take into account the student's (1) need for financial assistance, (2) class schedule, (3) health, and (4) academic progress.

## **STATE-SUPPORTED PROGRAMS**

### **North Carolina Student Incentive Grant**

Legal residents of North Carolina who are enrolled full time and maintain satisfactory academic progress may apply for the North Carolina Student Incentive Grant (NCSIG). Students must demonstrate "substantial financial need."

The NCSIG program is administered in North Carolina by the Free Application for Federal Student Aid. Details of the application process are available from high school

guidance counselors and from the Financial Aid Office. Application deadline is March 15 each year for the following academic year.

### **North Carolina Student Loan Program for Health, Science, and Mathematics**

This program was formerly known as the North Carolina Medical Student Loan Program, and it is operated as a Special Program Department of the North Carolina State Education Assistance Authority. To be eligible for the loan, students must be legal residents of North Carolina who are enrolled full time in degree programs oriented toward careers in health, mathematics, or science. Students may apply for this loan through the N.C. Education Assistance Authority. Students may attend a North Carolina post-secondary institution or eligible out-of-state institution. Award recipients are chosen according to major, academic capabilities, and financial need. Further information is available from the Financial Aid Office.

### **Nurse Education Scholarship Loan (NESLP)**

The N.C. General Assembly created this program in 1989 in an attempt to alleviate a nursing shortage.

Recipients must be enrolled in the LPN or the RN program, be North Carolina residents, and demonstrate financial need. The repayment of the loan may be forgiven by working as a nurse in North Carolina. Scholarship recommendations are made by the Office of Financial Aid based on information from the Gaston College Nursing Department and data from the student's financial aid application.

### **Nurse Scholars Program**

Recipients must be enrolled in the LPN or RN program and be North Carolina residents. This award is merit based and is selected by the NC Community College System based on information received from the Gaston College Nursing Department.

### **Wachovia Technical Scholarship**

This fund was established through a gift from the Wachovia Bank and Trust Company to the NC Community College System.

To qualify as a candidate for this scholarship, a person must be full-time student enrolled in the second year of a two-year technical program, must demonstrate financial need and scholastic promise, and must use the scholarship to pay for books, tuition, and transportation. The recipient is selected by the Gaston College Scholarship Committee.

### **North Carolina Community College Grant**

The North Carolina Community College Grant is a need-based grant established by the NC Legislature to provide funds to help meet the educational costs of NC residents attending community colleges. Legal residents of North Carolina who are enrolled at least half-time (6 credit hours) in an eligible program and maintain satisfactory academic progress may apply. Students must demonstrate financial need. Students with a bachelor's degree are ineligible.



The North Carolina Community College Grant program is administered in North Carolina by the Free Application for Federal Student Aid (FAFSA). Details of the application process are available from the Financial Aid Office.

### **GASTON COLLEGE FOUNDATION SCHOLARSHIPS**

The Gaston College Foundation, Inc. offers a variety of scholarships for Gaston College students. Donors of these scholarships (clubs, individuals, businesses, foundations, etc.) help determine what criteria are used in awarding them. **Applicants are considered for all scholarships for which they qualify.** To be eligible for a Gaston College Foundation scholarship, applicants must satisfy all Gaston College admissions requirements including any required placement tests for their program of study and complete a Gaston College Foundation Scholarship Application. **Completed applications must be received by March 31 each year** for the following academic year. Call the Foundation at 704-922-6511 for a complete list of individual scholarship criteria. In addition, a list of the Gaston College Foundation Scholarships is available on the Gaston College web page at [www.gaston.edu/students/financialaid](http://www.gaston.edu/students/financialaid).

### **OTHER GASTON COLLEGE SCHOLARSHIPS**

Gaston College has established academic scholarships for high school seniors residing in Gaston and Lincoln counties and plan to enroll at Gaston College as a freshman during the year of their high school graduation. High school seniors interested in academic scholarships should submit the appropriate application for the Management Honors (Academic) Scholarship or Careers Scholarship. These applications must be signed by the student's high school counselor. Completed applications must be received by March 31 for the following academic year.

#### **Management Honors (Academic) Scholarship**

These scholarships are designed for high school seniors who have demonstrated academic excellence and plan to attend Gaston College. The scholarships are not based on need. To be eligible for these scholarships, applicants must have maintained a "B" average (3.0 on a 4.0 scale) in high school, must present evidence of expectation of high school graduation, and plan to attend Gaston College full time. Applicants must satisfy all requirements for their proposed programs of study. Applicants must be from Gaston and Lincoln counties. Scholarships are renewable for a second year provided the recipient maintains a 3.0 grade point average while enrolled at Gaston College.

#### **Career Scholarships**

These scholarships are for high school seniors who intend to pursue careers in specified engineering technologies or industrial technologies majors and who satisfy all entrance requirements for their proposed programs of study at Gaston College. The scholarships are not based on need. To be eligible for these scholarships, applicants must have maintained a "B" average (3.0 on a 4.0 scale) in high school, must present evidence of expectation of high school graduation and plan to attend Gaston College

full time. Applicants must intend to pursue a degree, diploma, or certificate in engineering technologies or industrial technologies. Applicants must be from Gaston and Lincoln counties. Scholarships are renewable for a second year provided the recipient maintains a 3.0 grade point average while enrolled at Gaston College. However, the award will not be extended beyond three semesters for a diploma program or five semesters for a degree program. Off-campus co-op semesters will not be included in the scholarship.

## VETERANS INFORMATION

Students may be eligible for educational benefits from the Department of Veterans Affairs (DVA) while attending Gaston College. Gaston College has been approved as an institution qualified and equipped to provide education in the arts and sciences and in the career program areas under the provisions of chapters 30, 31, 32, 35, or 1606 of Title 38 of the U.S. Code.

Veterans in degree programs must show evidence of high school completion to be eligible for DVA certification and benefits

A grade of "IP" is sometimes awarded in Developmental Education courses and may be awarded to veterans or to veterans' dependents receiving DVA educational benefits.

Records of progress are kept by this institution on veteran and non-veteran students alike. Progress records are furnished to students at the end of each scheduled school term.

Veterans will accept the responsibility for overpayment made to them due to their failure to follow school and/or Department of Veterans Affairs regulations. Any changes in the placement of a student must be justified in writing by a Gaston College counselor, department chair, or instructor. This justification will be included in the student's academic records.

## VOCATIONAL REHABILITATION

The state of North Carolina provides financial assistance for residents who have permanent handicaps. Information concerning such aid is available through the Director of Vocational Rehabilitation, NC Department of Public Instruction, Raleigh, North Carolina 27611.





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## **ECONOMIC AND WORKFORCE DEVELOPMENT (CONTINUING EDUCATION) PROGRAMS**

As a non-credit arm of the college, Economic and Workforce Development, has the flexibility to offer short-term courses, broad-based programs, and various services to the citizens of Gaston and Lincoln counties.

Visit the Gaston College website ([www.gaston.edu](http://www.gaston.edu)) for Economic and Workforce Development information and current schedules.

### **Community Education Programs**

Community Education Programs include a wide variety of courses for the general public. Examples of these courses include language, investment, traffic school, painting, dancing, arts and crafts, computer applications, real estate, notary, and specialized professional certification and license renewal. Over 200 internet-based courses covering a diverse range of topics are also available. For more information, refer to the Economic and Workforce Development (Community Education) webpage: <http://www.gaston.edu/programs/communityed/index.htm>

### **Corporate Education**

The Professional Development Institute encompasses a broad range of programs designed for the training and educational needs of managers, professionals, and employees. The Institute offers certification and review courses for various professions including Certified Purchasing Managers and APICS (The Educational Society for Resource Management.) For more information, refer to the Corporate Education webpage: <http://www.gaston.edu/programs/corped/index.htm>

### **Focused Industrial Training**

Focused Industrial Training classes are designed for specific groups of workers who need to update their skills because of technological changes. This program is a state-supported training program that provides classes on a cost-share basis.

### **New and Expanding Industry**

The New and Expanding Industry Program encourages businesses to create more jobs by providing funding for specialized training courses. These courses are offered free of charge to qualifying industries and range from basic employee relations to highly sophisticated production skills.

### **Criminal Justice Academy**

The Criminal Justice Academy serves regional criminal justice agencies by offering a wide range of professional courses to maintain and supplement their specialized training needs. These courses include:

#### **State Mandated Criminal Justice In-Service Training Courses:**

Firearms Training and Qualification, Legal Update, Hazardous Materials, Bloodborne Pathogens, Juvenile Minority Sensitivity Training, Ethical Awareness, Domestic Violence Investigation, Methamphetamine Awareness



**Certification/Recertification Courses:**

Radar Operator, Time-Distance Operator, Radar/Time-Distance Operator, Chemical Analyst - Intoxilyzer, General Instructor Training, and Basic Security officer Training (armed and unarmed.)

**Specialized Training Courses:**

Standardized Field Sobriety Testing, Defensive Tactics, Oleoresin Capsicum (OC) Aerosol Spray, Officer Survival, Rapid Deployment: Immediate Response to an Active Shooter, Law Enforcement Driving, SWAT Training, Interview and Interrogation, TASER training, Basic Spanish for Law Enforcement, and School Resource Officer Training.

For more information, refer to the Criminal Justice Academy webpage: <http://www.gaston.edu/programs/cja/index.htm>

**Department for EMS Education**

The Emergency Medical Services Program serves local emergency medical agencies in emergency training for initial certification and recertification of both basic and advanced life support courses. Training is offered in cooperation with the State of North Carolina Office of Emergency Medical Services and leads to state certification. In some instances, training may lead to national certification. Additional courses are offered (both on-campus and off-campus) to meet the needs of EMS agencies in Gaston and Lincoln counties. Current available programs include EMT-Basic, EMT-Intermediate, EMT-Paramedic, EMT-Defibrillator, Medical Responder, Medical Responder Bridge to EMT Basic, EMT-Recertification, in-house EMS Education, EMS Methodology, CPR for Health Provider, Advanced Cardiac Life Support, Pediatric Advanced Life Support, Pre-hospital Trauma Life Support, Basic Trauma Life Support Survival, Sign Language, Spanish for EMS, and other related courses needed by EMS and First Responders on demand. The American Heart Association Community Training Center for Gaston and Lincoln counties offers basic life support community and professional cardiopulmonary resuscitation (CPR) courses, first aid, and AED training. For more information, refer to the Department for EMS Education webpage: <http://www.gaston.edu/programs/ems/index.htm>

**Fire and Rescue Training**

Gaston College leads the state in the delivery of Fire and Rescue Training. This program assists local municipal and volunteer fire departments and rescue squads in the overall training of firefighter and rescue personnel. Certification training is delivered in cooperation with the NC Fire and Rescue Commission and the National Fire Academy, utilizing standards of the National Fire Protection Association. Current available programs that offer North Carolina certification are Firefighter-Levels I & II, Rescue Technician, Rescue Technician Specialist, and Emergency Driver/Operator & Pumps. Courses are offered on-campus, at the Regional Emergency Services Training Center, and at various off-campus locations throughout Gaston and Lincoln counties.

**Regional Emergency Services Training Center**

The Regional Emergency Services Training Center (RESTC) provides basic, continuing, and advanced training in all areas of emergency services — fire, rescue, law enforcement, and emergency medical services. The primary intent of the RESTC is to improve the training and level of expertise within emergency services across the state of North Carolina.

The facility began operation in January 1991 and is located on 25 acres within the southern portion of the Gaston College campus. The RESTC includes a five-story, 21,000 square foot commercial burn structure, which is the largest of its type in the United States. The burn structure houses a pitched-roof ventilation training area, industrial simulation areas, interior combustible liquid area, five-story vertical confined space shaft, and 1,800 square foot simulated smoke maze. A second 1,500 square foot burn building, simulating a 3 bedroom ranch style house was added in 2004. In addition to the burn structures, there are also 12 flammable liquid/liquid petroleum gas pits, confined space areas, hazardous materials areas, and a training pavilion with fitness center located at the RESTC. The center also operates a mobile Swede Flashover Survival training unit which is used for firefighter survival training on campus and across the southeast. For more information, refer to the RESTC website: [www.GastonFire.com](http://www.GastonFire.com).

**Industrial Emergency Response Team and Fire Brigade Training**

Gaston College's RESTC specializes in Nuclear Fire Brigade and High-Risk Response Training and leads the state in the delivery of Industrial Fire Brigade Training. This program provides training for local, regional, and national industry through the delivery of customized programs of training addressing the specific needs of each customer. These programs include on-site visits, consultations, and specialized courses in the areas of confined space, hazardous materials, basic and advanced fire suppression techniques, and rescue operations.

**The Life Skills Department**

The Life Skills Department includes several programs designed to raise the literacy level in Gaston and Lincoln counties. The first step of the admission process is to take an assessment test. The test schedule is listed on the Life Skills page of College's website as well as in the Register.

Students between the ages of sixteen and eighteen who have not been out of school for at least six months must complete a Minor Student Application and be approved by the Minor Admissions Committee before they can be admitted to any program.

For more information, refer to the Life Skills Department webpage:

<http://www.gaston.edu/programs/lifeskills/index.htm>



Life Skills programs include the following:

**Adult Basic Education Program/General Education Development (ABE/GED)**

The ABE component provides basic skills education for adults with less than an eighth grade education. The ABE curriculum focuses on the development of skills required for employability, including reading, writing, speaking, computation, and critical thinking. The Life Skills department maintains ABE/GED learning labs at the Dallas Campus and the Lincoln Campus, as well as at other sites throughout Gaston and Lincoln counties. For additional information, please call 704-922-6322 or 704-748-1047.

**Adult High School (AHS)**

AHS offers high school courses developed at the local level for adults age eighteen or older. Program participants are awarded a high school diploma based on successful completion of the necessary coursework and the North Carolina Competency Test. Adult High School classes are offered daytime or evening at the Dallas Campus, Lincoln Campus, and East Campus/Textile Technology Center. For additional information, please call 704-922-6319 or 704-748-1045.

**Compensatory Education (CED)**

CED provides instruction to help mentally handicapped adults develop skills and abilities necessary to obtain employment and achieve self-sufficiency. Courses are offered in the areas of community living skills, consumer education, health, language, math, social science, and vocational education. For additional information, please call 704-922-6318.

**English As A Second Language (ESL)**

ESL provides instruction for individuals with limited English proficiency. ESL stresses development of basic language skills and preparation for daily life, employment, and citizenship. Gaston College offers ESL classes that teach written and conversational English to immigrants preparing them for citizenship and life in the community. Instruction is provided in a teacher-led lab environment as well as computer-based and distance learning at several locations throughout Gaston and Lincoln counties. For additional information, please call 704-922-6352.

**GED Testing**

GED provides testing designed to measure academic skills in reading, writing, mathematics, science, and social studies. Persons who pass the GED test battery receive a high school equivalency diploma. GED testing services are provided at the Dallas Campus and the Lincoln Campus. For additional information about GED testing, call 704-922-6321.

**Human Resources Development**

The Human Resources Development Program prepares the participants for the workplace. It is designed to help participants develop a positive attitude and self-concept as well as upgrade the level of education needed to prepare for, obtain, and maintain employment. Many of the classes are tuition-waived for qualifying adults and are available at many convenient locations throughout Gaston and Lincoln counties. For additional information, please call the HRD Coordinator at 704-922-6318.

**Small Business Center**

The Small Business Center is a specially funded program that provides no-fee consulting and seminars for entrepreneurs. The Gaston College Center is one of 58 Small Business Centers comprising the NC Community College Small Business Center Network. The Small Business Center provides assistance in business planning, marketing, accounting, personnel, financing, and management concerns relating to small business. A free self-assessment is available at <http://startabiz.gaston.edu>

For more information, refer to the Small Business Center webpage:

<http://aux.gaston.cc.nc.us/sbc/index.htm>

**ECONOMIC AND WORKFORCE DEVELOPMENT  
(CONTINUING EDUCATION) REPEAT POLICY**

Students are limited to two enrollments in the same state-supported occupational course within a five-year period. Students may enroll more than two times, but must pay the regular registration fee per contact hour rather than the regular course fee.

*(Exception: Enrollment in Public Safety courses is not restricted by the repeat policy.)*



# COLLEGE TRANSFER PROGRAMS

(Associate in Arts, Associate in Science, and Associate in Fine Arts)

The college transfer curriculum includes a wide range of course offerings in liberal arts and sciences for all students at the college. Some students take only a few courses each semester, but they may enroll in a two-year sequence and earn the Associate in Arts or Associate in Science degree.

Students can plan their program in order to transfer to four-year colleges and universities. The students enroll in what is usually referred to as the transfer curriculum, which offers courses that parallel those offered during the first two years at four-year institutions. Credits earned in this curriculum may be transferred to colleges and universities as the first and second year of a baccalaureate degree program. Students who intend to transfer their credits should plan their courses with a Gaston College counselor and/or advisor to be certain they will meet the current requirements at four-year colleges and universities. Students who have not decided upon a major but intend to transfer their credits towards a four-year degree should also meet with a counselor from the four-year school.

A Cooperative Education (COE) course or ACA course of one semester hour of credit may be included in a 65 semester hour credit Associate in Arts, Associate in Fine Arts, and Associate in Sciences program. This course will receive transfer evaluation (not necessarily credit) by the receiving institution.

Students who select the Associate in Arts (A10100) degree at Gaston College transfer to senior colleges to pursue such majors as the following:

Anthropology	French	Psychology
Art	History	Social Work
Business Administration	Music	Sociology
Education	Pre-Law	Spanish
English	Pre-Ministry	

Students who select the Associate in Science (A10400) degree at Gaston College transfer to senior colleges to pursue such majors as the following:

Agriculture	Pharmacy	Science-Biology,
Architecture	Physical Therapy	Chemistry, & Physics
Business Administration	Pre-Dentistry	Options
Education	Pre-Medicine	Textile-Chemistry
Engineering	Pre-Optometry	or Textile
Forestry Mathematics	Pre-Veterinary Medicine	Technology
Nursing		

Students who select the Associate in Fine Arts (A10200) degree at Gaston College transfer to senior colleges to pursue such majors as the following:

Animation	Digital Design	Jewelry Design
Architecture	Environmental Design	Metalsmithing
Art Education	Fashion Design	Museum Management
Art History	Fiber Crafts	Painting
Arts Management	Filmmaking	Photography
Ceramics	Fine Arts	Printmaking
Commercial Art	Graphic Design	Product Design
Communications Arts	Illustration	Sculpture
Computer Graphics	Interior Design	Textile Design

Each student should confer with a counselor or advisor about course selection prior to registration. Only with approval of the appropriate dean may students substitute courses for those specifically required for graduation and courses outside the area of specialization. Students are responsible for the proper completion of their academic programs based upon the requirements stated in the Gaston College Catalog in conjunction with the current schedule.

Counselors or advisors will provide assistance to students concerning transfer to other institutions. Transfer of credits from one institution to another is subject to change. Therefore, it is the responsibility of the transferring students to research their prospective senior institution. Students may contact the counseling department of Gaston College or the admissions office at the college to which they plan to transfer for information and guidance on transfer of credits. **Although faculty members, staff members, counselors, advisors, and administrators are available to help students with planning, the responsibility rests upon the individual student.**

### Comprehensive Articulation Agreement (CAA)

Under the provisions of House Bill 739 and Senate Bill 1161, the North Carolina Community College System and the University of North Carolina have developed a Comprehensive Articulation Agreement (CAA) to facilitate the transfer of community college students.

Gaston College graduates of Associate in Arts and Associate in Science degree programs who have made a C or better in each course will be considered to have fulfilled the institution-wide, general education requirements of UNC schools to which they are admitted and will be admitted as Juniors. Foreign language and physical education requirements of receiving institutions must still be met.

Transfer students from Gaston College who have completed the 44 hours of general education classes (core classes) with a C or better in each class will be considered to have fulfilled the institution-wide, general education requirements of UNC schools. The general education core is a set of 44 semester hours (S.H.) that specifically includes approved courses in the following:



	<u>AA</u>	<u>AS</u>
English Composition	6 SHC	6 SHC
Humanities/Fine Arts	12 SHC	9 SHC
Social Behavioral Sciences	12 SHC	9 SHC
Natural Sciences	8 SHC	8-12 SHC
Math	6 SHC	8-12 SHC
<b>TOTAL</b>	<b>44 SHC</b>	<b>44 SHC</b>

Transfer students from Gaston College who have not completed the 44 hours of general education classes (core classes) with a C or better in each class or who have not graduated will have to meet the general education requirements of the receiving institution. These students will have their transcripts evaluated on a course-by-course basis by the receiving universities.

The following private colleges and universities in North Carolina honor the CAA: Barton, Belmont Abbey, Bennett, Brevard, Campbell, Catawba, Chowan, Gardner-Webb, Johnston C. Smith, Livingstone, Louisburg, Mars Hill, Montreat, Mount Olive, North Carolina Wesleyan, Pfeiffer, Queens, St. Andrews, Saint Augustine's, Shaw, Warren Wilson, and Wingate.

## ASSOCIATE IN APPLIED SCIENCE DEGREES

The Associate in Applied Science (A.A.S.) degrees are two-year terminal programs that prepare the student for the workforce. However, there are some senior institutions where all or part of these degrees are accepted as the first two years of a four-year program. A few of the senior institutions that accept some of Gaston College A.A.S. degrees are the following:

Appalachian State University  
Belmont Abbey College  
Gardner-Webb University  
Mars Hill College  
Lenoir Rhyne College

Pfeiffer College  
University of NC at Charlotte  
Western Carolina University  
Winston-Salem State University

Some senior institutions will evaluate the Associate in Applied Science Degree on a course-by-course basis.

The minimum requirements for the Associate in Applied Science Degree vary with the degree program. The completion of no fewer than thirty (30) semester hours while in attendance at Gaston College is required.

A student is eligible to graduate with an Associate in Applied Science Degree upon completion of the curriculum requirements for the particular program listed in this catalog. A student must have a 2.00 grade point average on courses presented for graduation.

### Associate in Applied Science degrees are offered in the following programs:

- Accounting A25100
- Architectural Technology A40100
- Automotive Systems Technology A60160
- Biomedical Equipment Technology A50100
- Broadcasting and Production Technology A30120
- Business Administration A25120
  - Business Administration - Human Resources Concentration A2512C
  - Business Administration - Logistics Management Concentration A2512E
- Civil Engineering Technology A40140
- Computer Engineering Technology A40160
- Computer Programming A25130
- Criminal Justice Technology A55180
- Dietetic Technician
- Early Childhood Associate A55220
- Electronics Engineering Technology A40200
- Emergency Medical Science - Paramedic A45340
- Emergency Medical Science Bridging Program A45340B
- Industrial Engineering Technology A40240
- Information Systems A25260
- Information Systems - Network Administration & Support A2526D
- Internet Technologies A25290
- Machining Technology A50300
- Mechanical Engineering Technology A40320
- Medical Assisting A45400
- Medical Office Administration A25310
- Nursing (Registered Nursing) LPN to RN A45100
- Nursing (Registered Nursing) A45120
- Office Systems Technology A25360
- Office Systems Technology - Legal A2536A
- Paralegal Technology A25380
- Therapeutic Massage A45750
- Veterinary Medical Technology A45780



DIPLOMAS

A student is eligible to graduate with a diploma upon completion of the curriculum requirements for the particular program listed in this catalog. A student must have a 2.00 grade point average on courses presented for graduation.

- Accounting D25100
  - AC/Heating & Refrigeration- D35100
  - Automotive Systems Technology - D60160
  - Broadcasting and Production Technology - D30120
  - Civil Engineering Technology - D40140
  - Early Childhood Associate - D55220
  - Electrical/Electronics Technology - D35220
  - Electronics Engineering Technology - D40200
- Industrial Engineering Technology - D40240
  - Industrial Systems Technology - D50240
  - Machining Technology- D50300
  - Mechanical Engineering Technology - D40320
  - Medical Transcription - D25320
  - Office Systems Technology - General - D25360
  - PN (Practical Nursing) - A10300PN
  - Therapeutic Massage - A10300TM
  - Welding Technology - D50420

CERTIFICATES

A minimum of 75 percent of the requirements for the certificate must be completed at Gaston College. A student must have a 2.00 grade point average on courses presented for graduation.

- AC/Heating & Refrigeration - Cooling - C35100
  - AC/Heating & Refrigeration - Heat Pump - C35100
  - AC/Heating & Refrigeration - Heating - C35100
  - Architectural Technology - CAD Certification - C40100
  - Automotive Systems Technology - Engines & Power Trains - C60160
  - Automotive Systems Technology - Fuel & Electrical Systems - C60160
  - Basic Computer Skills - C25260
  - Broadcasting and Production Technology - C30120
  - Business Administration
    - Human Resources Management - C2512C
    - Logistics Management - C2512E
  - Civil Engineering Technology - C40140
  - Computerized Accounting - C25100
  - Dietary Manager - C45310
  - Early Childhood Associate - Infant-Toddler - C55220A
  - Early Childhood Associate - Administration - C55220B
  - Early Childhood Associate - Early Childhood- C55220C
  - Early Childhood Associate - School-Age - C55220D
  - Early Childhood Associate - Special Needs - C55220E
- Electrical/Electronics Engineering Technology - C35220
  - Electronics Engineering Technology - C40200
  - Federal Income Tax - C25100
  - Industrial Engineering Technology - C40240
  - Industrial Management Technology - C50260
  - Industrial Systems Technology - C50240
  - Machining - Manual Machine Operation - C50300
  - Machining - CNC - C50300
  - Machining - CNC and CAD - C50300
  - Mechanical Engineering Technology - C40320
  - Medical Office Administration (Basic) - C25310
  - Medical Office Administration (Intermediate) - C25310
  - Nursing Assistant - C45480
  - Office Systems Technology - General C25360
  - Office Systems Technology (Legal) - Basic C2536A
  - Office Systems Technology (Legal) - Intermediate C2536A
  - Phlebotomy - C45600
  - Production Technology - C40240A
  - Quality Engineering Technology - C40240B
  - Welding - (Level I) - C50420
  - Welding - (Level II) - C50420

## DEVELOPMENTAL EDUCATION

The Developmental Education Program provides students with the opportunity to build academic skills and acquire the background that should facilitate success in their desired curriculum program. Applicants to degree, diploma, and certificate programs are required to participate in the COMPASS assessment program, which provides placement information for reading, English, and math. Once the assessment scores are determined, students are counseled about the courses needed in order to reach their academic and career goals. Students placing into developmental courses may concurrently register for certain courses within their desired curriculum if those courses do not require completion of one of the developmental courses as prerequisite.

Developmental courses include basic college preparatory courses in reading, writing, and mathematics. In addition, the program offers a study skills class that teaches strategies for successful learning. Students placing into two or more developmental classes should also take College Study Skills.

### Developmental Education Courses

			Class	Lab	Credit
ENG	080	Writing Foundations	3	2	4
ENG	090	Composition Strategies	3	0	3
ENG	090A	Composition Strategies Lab	0	2	1
RED	080	Intro to College Reading	3	2	4
RED	090	Improved College Reading	3	2	4
MAT	060	Essential Mathematics	3	2	4
MAT	070	Introductory Algebra	3	2	4
MAT	080	Intermediate Algebra	3	2	4
ACA	118	College Study Skills	1	2	2

## GASTON COLLEGE LEARNING CENTER

The Gaston College Learning Center, established in 1996, is designed to provide students with opportunities for academic and personal growth. The center is committed to the philosophy that given adequate services, support, time, and appropriate teaching strategies, all students can successfully accomplish their academic goals, whether that goal includes transfer to a four-year institution or the successful completion of a single course.

GCLC services are available to a diverse constituency. The program places primary emphasis on serving the needs of students “at risk” in the college environment. These students traditionally include those who are economically and educationally disadvantaged, disabled, or under-prepared and students who are members of non-traditional or minority groups. However, services are not limited to these groups. The GCLC actively provides support to all students experiencing difficulty in achieving their potential. Additionally, faculty members may use the academic support services to supplement their classroom instruction by referring students to the GCLC.



This service to the faculty also includes consultation on students' needs, supplementary educational materials, and additional academic support services.

The program has one specific function in providing support for students of Gaston College. This function is to provide academic support services to the general student population and includes the following:

1. **GCLC Peer-Tutoring Services:** This program provides tutorial services in selected general education courses for all students by appointment or walk-in basis. The program is staffed by tutors who have completed 12 credit hours or more (not including developmental classes). All tutors undergo initial training and meet regularly for planning, evaluation, and skills development. Tutoring services are available not only for students having difficulty in passing a course, but also for students wanting to improve a grade from "B" to "A."

2. **Help for under-prepared students:** Under-prepared students who arrive at Gaston College need special assistance during their first few semesters on campus and beyond. Through the GCLC, these under-prepared students are provided with support, special attention, and academic tutoring. They have special advisors among the developmental education faculty and staff, and are provided with the resources necessary to assist them in becoming successful, independent learners.

## PEER TUTORING PROGRAM

The Gaston College Peer Tutoring Program is a part of the larger academic support service called the Gaston College Learning Center. Tutorial services are offered in core curriculum courses on both an appointment and a walk-in basis. The program is staffed by paid and volunteer tutors who have A's in the courses they tutor, and who are recommended by their instructor or the chair of the department in which the course is taught. Tutors are carefully interviewed by the Learning Center Coordinator and undergo an initial training period. They also meet regularly with other tutors and staff members for planning, evaluation, and skills development. Careful records are maintained on all tutoring sessions. In addition to being knowledgeable and well-trained, tutors are also chosen for their sensitivity toward students and for their interest in teaching.

Students who are not satisfied with their understanding or performance in a course may use this free service. Help is available in the area of understanding concepts, problem-solving, and study skills. Tutoring services are available not only for the student who is having difficulty in passing a course, but also for those students who want to improve a passing grade.

Peer tutoring services offer several options for students to increase understanding of course content and to improve performance.

Tutoring is available in the following core courses: Most math and English classes, as well as basic computer, accounting, science, and psychology classes. Volunteer tutoring is available in other core courses. If a tutor is not available for a particular course, the tutor coordinator will make every effort to obtain one if the demand is sufficient. General tutoring is available on an appointment or walk-in basis in the Dalpiaz Student Success Center from 7:30 a.m. to 9:00 p.m., Monday through Thursday, and 7:30 a.m. to 2:00 p.m., on Friday.

The Lincoln Campus also houses a Learning Center in Room 206. Hours at this site vary from semester to semester, but both day and evening services are provided.

## COOPERATIVE EDUCATION

Cooperative Education (co-op) is an academic program that integrates classroom study with practical work experience in industry, business, and public agencies. The work experience constitutes a regular and essential element in the educational process by allowing students to apply their studies in a real work environment.

The co-op work experience is concurrent or alternates with academic studies. It is a paid or non-paid work experience and students receive academic credit toward degree, diploma, or certificate requirements. Students work either part-time or full-time jobs with employers selected and/or approved by the college. Students are contacted and evaluated periodically by a faculty coordinator and receive on-the-job supervision by the employers.

### Eligibility

Students must meet the following criteria to be accepted into the program:

- Be enrolled in an approved co-op curriculum.
- Have a minimum 2.00 GPA depending on program.
- Be recommended by a faculty member.
- Be approved by the Cooperative Education office.

(Note: Enrollment in the co-op program does not guarantee placement for every student.)

### Application Procedure

Interested students must complete a Cooperative Education application, submit a copy of their college transcript, and speak with a member of the cooperative education staff.

### Presently Employed Students

Students may qualify to receive academic credit if they are already employed in an area directly related to their academic major. The following general criteria will be used to determine eligibility:

1. The student must be acquiring new skills or knowledge related to their academic major and/or
2. The student must be developing a recently-learned skill or applying recently-learned knowledge related to their academic major and/or



3. The student must be receiving increased levels of responsibility related to their academic major and
4. The employer agrees to assist with an evaluation of the student's progress and to permit on-the-job visits by co-op staff member.

## STUDENT EMPLOYMENT SERVICES

Student Employment Services assists students and graduates who are seeking employment by making them aware of the range of career opportunities available, helping them present themselves effectively as candidates, and aiding them in finding part-time, full-time, temporary, or summer employment.

Some of the specific services and activities offered are Career Day; employer campus visits; resume writing information/workshops; interview techniques information/workshops; and posting of part-time, full-time, and temporary job openings on the bulletin board outside the Myers Center cafeteria and in the Student Employment Office.

## DISTANCE EDUCATION

Distance education at Gaston College expands learning opportunities by using non-traditional delivery methods to meet the growing scheduling needs of students throughout Gaston and Lincoln counties. The current technologies available include two-way interactive video, Internet courses, satellite broadcasts, cable television broadcasts, and College-by-Cassette/DVD.

### North Carolina Information Highway

Through the North Carolina Information Highway, Gaston College can receive courses or teleconferences from other institutions using two-way interactive televisions in classrooms. Participants at the receiving sites interact with the presenters and participants at the originating sites. The Dallas Campus also delivers two-way interactive classes and presentations to the Lincoln Campus of Gaston College and to other institutions.

### College-by-Cassette/DVD

College-by-Cassette/DVD is videotaped lessons provided to each student on a set of video cassettes or DVDs at the beginning of the semester. Students participate in on-campus orientations and scheduled meetings, purchase textbooks and study guides, complete tests and assignments, and communicate with the instructor. Video tapes are available in the Morris Library.

### **Internet-Based Courses**

A wide-range of Internet-based courses is available through the curriculum (credit) or continuing education (non-credit) programs. These courses are designed for students with some Internet background. Students must have access to a computer linked to the Internet. Students may also use the Internet-accessible computers in the Morris Library to take the courses. For curriculum course information contact the Director of Distance Education at 704-922-6515 or for continuing education (non-credit) course information call Community Education, Lincoln Campus office at 704-748-1057.

## **THE UNIVERSITY CENTER AT GASTON COLLEGE**

The University Center at Gaston College was established in 1990 through the efforts of Appalachian State University, The University of North Carolina at Charlotte, and Gaston College. Located on the Gaston College campus, the University Center coordinates a cooperative program with various area colleges and universities in order to bring four-year and graduate level classes to the Gaston College campus in order to make classes more accessible to the citizens of Gaston and Lincoln counties. Identifying the needs within the community and cooperation with various senior institutions are the dominating factors that determine the classes offered through the University Center. Most courses are offered during evenings for the convenience of working adults.

Various institutions of higher learning throughout North Carolina participate with the University Center to help meet the growing need for upper division and graduate educational opportunities for evening students. Gardner-Webb University presently offers undergraduate courses leading to a Bachelor of Science degree in Business Administration, Accounting, Criminal Justice, and Human Services. Western Carolina University offers a Bachelor of Science in Birth-through-Kindergarten. Appalachian State University will begin offering a Masters in Public Administration in fall 2005.

All undergraduate and graduate level courses offered as part of the University Center on the Gaston College campus appear in the college's schedule of classes published each semester and can also be accessed on the college's website. For additional information, please call 704-922-6482.





# Gaston College

Opportunities For Life

2006-2008 Gaston College Academic Catalog

## VI. Policies and Procedures

## POLICIES, PROCEDURES

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## STUDENT RESPONSIBILITY

Gaston College has established a set of regulations, policies, and standards in order to provide an academic environment that will promote quality education and assure compliance with state, federal, accreditation, and certification directives and statutes.

Students are responsible for the proper completion of their academic programs based upon the requirements stated in the Gaston College Catalog in conjunction with the current schedule. Faculty members, staff members, counselors, and administrators are available to help students with planning, but the responsibility of fulfilling all requirements rests upon the student.

### CLASS ATTENDANCE

College instruction is designed for class attendance. The responsibility for class attendance is placed specifically on the student. At the beginning of each course it is the responsibility of each instructor to notify students in writing of the course attendance requirements.

A student who fails to maintain attendance requirements may be dismissed from a given class upon recommendation of the instructor.

The student is responsible for all material covered in each course for which he or she is registered. In no instance does absence from class relieve the student of the responsibility for the performance of any part of the course work. The student is further responsible for initiating any request to make up work because of class absence. The decision to assist the student with makeup work, including tests, in every case rests with the instructor. The instructor may require verification of medical and personal circumstances presented by the student to influence this decision. Course work not made up may affect a student's grade in the final evaluation since the instructor is not required to offer the student an opportunity to make up course work.

A student may seek reinstatement into class by submitting a written request to the instructor. If the request is denied, the student can petition for reinstatement directly to the Vice President for Academic Affairs, who will make a final ruling upon the petition. If the request is approved, a reinstatement form must be completed and submitted to the Office of the Registrar.

### STANDARD OF HONESTY

Dishonesty, cheating, plagiarism, and knowingly furnishing false information to the College are regarded as serious offenses. It is expected that cases of dishonesty will first be considered at the department faculty level; then the matter will follow procedures in accordance with the Code of Student Conduct.



## THE OFFICE OF THE REGISTRAR

The Office of the Registrar directs registration each semester for curriculum classes. This office provides transcripts (official and student copies), verification and certification of enrollment status, processes drops/adds, withdrawals, and final grade reports. This office directs the graduation ceremony each year, orders and issues diplomas, evaluates previous college transfer work, processes name, address, and major changes, and academic advisor assignments.

Specific registration information is contained in the college's schedule of classes.

### **FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT POLICY**

Gaston College has a long-standing commitment to the protection of students' rights and privacy of information. Gaston College complies with the provisions of the Federal Family Educational Rights and Privacy Act of 1974, State of North Carolina Law, and the State Department of Education Division of Community College rules. These federal and state requirements relate to accessibility and confidentiality of student records.

The Gaston College Policy and Procedures Manual section 4-31, Confidentiality and Access of Student Records, provides pertinent and detailed information concerning classification of student records. Detailed information is also provided in the Gaston College Student Handbook and website.

Students have the right to inspect their educational records and correct such records, if warranted. Students are protected from release of information without written consent. All student records are open for inspection and review by the student unless he or she waives this right. The parent(s) of a dependent student as defined in Title 26 U.S.C.S.S. 152 Internal Revenue Code also has the right to inspect records that are maintained by the College on behalf of the student. Proof of dependency must be on record with the College or provided to the Office of the Registrar prior to reviewing the records.

There are three categories of records: Directory Information Records, Limited Access Records, and Sole Possession Records.

Directory Information Records, which may be made public, include a student's name, address, telephone number, date of birth, major field of study, dates of attendance, and degrees received. This information will only be released by the Office of the Vice President for Student Services or a designee after the requestor has demonstrated a legitimate need to have such information. Any student not wishing the release of directory information must file a written request with the Office of the Registrar no later than the last day of Late Registration. Otherwise, the College may disclose directory information for legitimate purposes.

Limited Access Records pertain to the permanent academic records of the student, disciplinary records, financial information, and testing data. The college will not release information in Limited Access Records without the written permission of the student.

Sole Possession Records pertain to records of instructional, supervisory, and administrative personnel that remain in the sole possession of the maker and are not accessible or revealed to any other person.

**RELEASE OF TRANSCRIPTS**

In accordance with the Family Educational Rights and Privacy Act of 1974, transcripts will only be released or sent upon the written request of the student. Official and student copies of Gaston College transcripts should be requested in writing to the Office of the Registrar. Transcripts will not be released unless all tuition, fees and other obligations due the College have been satisfied. It is against Gaston College policy to fax transcripts. There is a \$5 charge for transcripts, although this is subject to change at the discretion of the College.

Gaston College does not issue transcripts of other colleges and universities or high school transcripts. Any student needing a transcript from a college or high school in which they previously attended, must contact that institution directly.

**CHANGE OF ADDRESS**

Students are required to keep an updated address on file with the Office of the Registrar while they are enrolled at Gaston College. A request for a change of address should be submitted in writing to the Office of the Registrar. Change of Address forms are available in the Office of the Registrar.

**STUDENT CLASSIFICATION**

- Day: A student who is enrolled for a majority of course work scheduled before 4:30 p.m.
- Evening: A student who is enrolled for a majority of course work scheduled after 4:30 p.m.
- Full Time: A student who is enrolled for twelve or more semester hours.
- Part Time: A student who is enrolled for fewer than twelve semester hours.

Full-time and Part-time Status: A student must be registered for at least 12 semester hours during fall and spring terms or 9 semester hours during the summer to be considered a full-time student. Although the normal course load for a full-time student is 16 semester hours, a counselor or advisor may recommend a heavier or lighter load depending on the student’s ability and/or the student’s previous academic performance.



## CHANGE OF MAJOR/PROGRAM

Students may change their designated program by meeting with an advisor and completing and submitting a Change of Major form to the Office of Admissions. These forms are available in the Counseling Center. Once the Change of Major Form has been processed; a new academic advisor will be assigned. Students should meet with their new academic advisor to review their previous course work and obtain information about program requirements for their new major. Students who receive any type of financial aid should consult with the Office of Financial Aid before changing his/her major.

## REGISTRATION PROCESS FOR CURRICULUM COURSES

### HOW TO REGISTER

Students are responsible for registering each semester during the designated registration periods. Before a student can register for courses, he/she must have an application on file in the Office of Admissions. Prior to the start of the semester, registration is held for all students - current, new, and returning. Students are encouraged to register during the early registration period by utilizing Telephone Registration. After registration, students are not eligible to register or add classes until the next designated registration period. The actual dates for all registration periods are published in the Register as well as the Gaston College Calendar. Students can add or drop classes during the published registration periods. A student who finds it necessary to add or drop a class during the registration periods must obtain the proper form from the Office of the Registrar. Add forms must be signed by the student's advisor and returned to the Office of the Registrar for final processing.

After the admissions process has been completed, registration is a three-step process.

1. Students will meet with an academic advisor or counselor to select their courses.
2. Students will register using Telephone Registration or in-person within their division or the Office of the Registrar.
3. Students will pay their registration fees by the deadline published in the Register and in the Gaston College Calendar.

\* Students are not officially registered until all fees have been paid or deferred payment is granted by the Business Office.

A student will not receive credit for any course in which registration has not been completed. Students attending a class for which they are not officially registered will receive neither a grade nor credit hours for the course.

The privilege of registering may be withheld by the College for the following reasons: unpaid fees, overdue loans, overdue library materials, or incomplete admission records.

Students are highly encouraged to obtain a printed schedule reflecting their course registration from the Office of the Registrar.

Students who wish to register for courses through the Continuing Education division must contact the appropriate office to do so. (704) 922-6251. The Division of Continuing Education is located on the second floor of the Dalpiaz Student Success Center. Although no admission application is required, most community education courses require a reservation form with payment in advance.

### **AUDITING A COURSE**

Students who audit a class receive no credit and are encouraged to attend class, participate in class discussions, and take exams. Students who wish to audit a course must be properly registered for the course. Fees for auditing a course are the same as for credit students. Performance in an audited course will not affect the student's grade point average. Students must complete an Audit Form, obtain the signature of the instructor and submit it to the Office of the Registrar. Audit status may be declared through the eleventh week of the class (fall and spring semesters) and by various times during the summer sessions. Once declared, audit status cannot be reversed. The published deadline dates to audit a class for any given semester are available in the Gaston College Calendar.

### **WITHDRAWAL PROCESS**

Although instructors have the option of withdrawing a student from his/ her class if the student fails to maintain the attendance requirements established by the instructor, it is the student's responsibility to withdraw from a course in which he/she does not wish to continue. Withdrawal from a course for academic reasons must be initiated by a student prior to the eleventh week of the semester. The published deadline dates to withdraw from a course for any given semester are available in the Gaston College Calendar.

The student must complete an official withdrawal form available from the Office of the Registrar and indicate the last day of attendance on the form. An instructor's signature is not required to withdraw from a class. The Office of the Registrar must receive the withdrawal form by the published deadline date. A withdrawal letter grade of "WA" is assigned to a student who has attended at least one class session before the withdrawal is processed. A withdrawal letter grade of "NS" is assigned to a student who has never attended a class session. Although the "WA" and "NS" grade appear on the student's academic transcript, these are not considered as hours attempted and will not affect the cumulative grade point average.

**NOTE:** Students who maintain high scholastic averages are not recognized for the President's, Dean's or Honor's List if a withdrawal appears on his/her transcript for the given semester.



After the eleventh week of class, withdrawals are granted for the following reasons:

Medical - for reasons of accidents or illness

Administrative - for unusual or unavoidable circumstances

After the eleventh week, a course withdrawal requires the approval of both the instructor and division dean.

**NOTE:** A student who stops attending classes for any reason should not expect the instructor to withdraw him or her from the class. It is the student's responsibility to officially withdraw by completing and submitting a withdrawal form in the Office of the Registrar by the deadline date published in the Gaston College Calendar. Failure to do so could result in a grade of "F," which is counted as a grade and computed in the grade point average.

### **COURSE OVERLOAD**

No student may carry in excess of 18 semester hours without prior written permission of the appropriate division dean. Course Overload Waiver forms are available in the Office of the Registrar.

### **COURSE SUBSTITUTIONS**

Under special circumstances, a course substitution may be made in a student's program of study. The student is responsible for requesting his/her department chair for consideration of substituting a completed course for one not completed in their program of study. The course could be taken at Gaston College or another institution. If the course is taken elsewhere, the course must meet transfer requirements. The divisional dean is responsible for approving the course substitution. The Office of the Registrar must be notified by utilization of the Course Substitution Form.

Note: The Office of the Registrar is responsible for maintaining the Course Substitution Form in the student's permanent record. However, there are no changes made to a student's transcript when the divisional dean approves a course substitution.

## **AWARDING OF CREDITS**

### **CREDIT BY EXAMINATION**

Students who wish to receive course credit for competencies acquired through work experience or other non-academic experiences can request credit by examination. The student is responsible for requesting credit by examination. The instructor, in partnership with the divisional dean, is responsible for granting or denying the request for credit by examination. A grade of "CE" is assigned for successful credit by examination on the student's academic record. Only hours earned for credit are recorded. Credits by examination will be applied toward graduation requirements.



Quality points will not be awarded. A grade of "CE" is not used in computing a student's grade point average. The instructor is responsible for keeping records of the examination and reporting the results, using the Credit by Examination form, to the Office of The Registrar by the third week of class. Credit by examination cannot be earned for classes numbered less than 100.

No student may request credit by examination for more than 18 credit hours. Because of the nature of the EMS program, students enrolled in the Emergency Medical Science program are exempt from the College's policy on maximum "CE" credits.

Students who wish to attempt credit by examination must register and pay for the course in which he/she is requesting credit by examination. The examination must be administered during the first 10 days of the semester and may be taken only once. Students who receive any type of financial aid should consult with the Office of Financial Aid before attempting credit by examination.

### **ADVANCED PLACEMENT**

If a student has taken AP (Advanced Placement) courses in high school and has earned a score of "3" or higher, he/she is eligible to receive college credit for that score. Scores older than five years are not considered for transferred credit. The results of the Advanced Placement Examination should be sent directly from The College Board to the Office of the Registrar. The contact information for obtaining official score reports is listed below:

AP Services  
P.O. Box 6671  
Princeton, NJ 08541-6671  
Telephone (609) 771-7300  
Fax (609) 530-0482

### **CLEP CREDIT**

College level credit is awarded to students who provide official CLEP (College Level Examination Program) results to the Office of the Registrar. Scores of 50 or above on subject examinations are required for college credit. No credit is given for the general examination. CLEP scores older than five years are not considered for transferred credit. For further information on CLEP contact:

CLEP  
P.O. Box 6601  
Princeton, NJ 08541-6601  
Telephone (609) 771-7865

### **MILITARY CREDIT**

The Guide to the Evaluation of Educational Experiences in the Armed Services will be used to evaluate military training.



# AWARDING OF TRANSFER CREDITS FROM ANOTHER SCHOOL

Students may be eligible to receive transfer credit(s) to Gaston College from regionally accredited colleges and universities. Gaston College accepts transfer credits from institutions of higher education that are accredited by the Southern Association of Colleges and Schools and other regional agencies recognized by the Council on Postsecondary Accreditation as described in the current edition of Transfer Credit Practices of Designated Educational Institutions published by the American Association of Collegiate Registrars and Admissions Officers.

A transfer credit evaluation is provided for each student with prior college work when the student has an application for admission on file with the Office of Admissions. Students must earn at least 20 semester credit hours of their course work at Gaston College in order to receive a degree or diploma from Gaston College.

Time limits may restrict the transfer of some courses if it was determined that the course material is outdated. Only course work completed at Gaston College is used in computing grade point averages.

Once a transfer evaluation has been completed, a copy of the evaluation will be mailed to the student and a second copy will be filed in the student’s file. The student should meet with his/her academic division to determine how and if the course work will apply toward the student’s degree program and graduation requirements at Gaston College.

## CREDITS THAT WILL TRANSFER TO GASTON COLLEGE

1. Courses which have a Gaston College equivalent course in terms of course title/content/semester hour equivalency
2. Courses earned with letter grades of “C” or higher
3. Courses from regionally accredited schools
4. Some military credits on a case by case basis with proper documentation
5. Appropriate CLEP score(s)
6. AP credit (Advanced Placement Credit) for scores of “3” or higher
7. Credit from foreign institutions, only if an official course-by-course evaluation is provided and all other transfer requirements have been met.
8. Possible CJC credit for students who successfully complete the BLET program.
9. Possible DET credit for students who successfully complete Dietetic Technician programs and are recommended for credit by the Chair of the Dietetic Technician program
10. Possible FIP credit earned from the National Fire Academy as recommended by ACES and approved by the Director of the Fire Protection Technology program.

11. Possible AUT credit earned through the ASE examination and approved by the Chair of the Automotive Systems Technology program.
12. Possible EMS credit earned through certification examinations and approved by the Director of the EMS program.
13. Possible Tech Prep credit earned for students who complete specific high school courses with a grade of "B" or higher, and a raw score of 80 or higher on the Career Technical Education post-assessment. Students must enroll in Gaston College within two years of their high school graduation date to receive credit. Gaston College must be provided an official high school transcript showing the course(s), the grade(s) earned and the corresponding Career Technical Education post-assessment scores.

### **CREDITS THAT WILL NOT TRANSFER TO GASTON COLLEGE**

1. Courses which do not have a Gaston College equivalent course in terms of course title/course content/semester hour equivalency
2. Courses earned with a letter grade lower than a "C"
3. Courses from regionally non-accredited schools
4. Co-op work experience courses
5. Any computer classes five years or older
6. Any OST class five years or older
7. Department-specific time limit restrictions (varies by department)
8. Courses earned through credit by examination

### **TRANSFERRING TO ANOTHER SCHOOL FROM GASTON COLLEGE**

Counselors and other members of the college faculty and staff will advise and assist any student planning to transfer to a four-year institution. However, it is the student's responsibility to follow their intended school's admission requirements closely. These requirements are indicated in the particular institution's catalog. Reference copies of various catalogs are available in the Counseling and Career Development Center.

Because of the highly specialized nature of courses in particular programs, some courses are not designed for transfer to a four-year institution. Students also should note that courses numbered 100 or lower usually do not transfer.

Students are strongly advised to see a counselor or advisor regularly if they are planning to transfer to a four-year college or university. Representatives from four-year colleges visit the campus regularly in order to help Gaston College students plan their transfer programs.



## CHARLOTTE AREA EDUCATIONAL CONSORTIUM

Gaston College is a member of the Charlotte Area Educational Consortium, which includes 24 other area colleges and universities. A cross-registration program provided by the consortium allows Gaston College students to take certain courses at other colleges if not available at Gaston. Information on cross-registration is available in the Office of the Registrar or by visiting CAEC Online at [www.caeconline.org](http://www.caeconline.org).

### GRADING SYSTEM

The college, as part of the North Carolina Community College System, converted to the semester system during the summer session of 1997. All credits earned prior to summer 1997 are listed as quarter hour credits. All credits earned in subsequent terms are semester credits.

The grade point average is calculated by dividing the total number of semester hours attempted, including both courses passed and failed, by the total quality points. Listed below is a detailed example of the formula for how to determine a GPA:

1. Convert the grades to quality points. Multiply the letter grades' values by the number of credit hours attempted in each course. Letter grades have the following values: A=4, B=3, C=2, D=1, F=0, WA=0. (I, W, AU, TR, IP, CE, and X are not included in the determination of a GPA.) For example, if a student earns a B in a 3-hour course, the quality points would be 9 (3 grade points times 3 credit hours equals 9 quality points.)
2. Add all the quality points.
3. Add all the hours attempted.
4. Divide total quality points by the total hours attempted to determine the GPA.

A final grade is the instructor's evaluation of the student's work and achievement throughout a course. Grades are given at the discretion of the instructor. Once a grade has been submitted, it will not be changed, except in the event of a clerical error or as a result of the Grade Appeal Process.

### PROCEDURE FOR GRADE APPEAL

Questions and concerns about grades are often the result of misunderstandings about grading practices and expected standards. Direct communication between the instructor and the student usually clears up these misunderstandings. It is the purpose of the grade appeal policy to outline appropriate steps the student should take to clarify any questions about grades or grading practices. These steps are summarized as follows:

1. The student should make an appointment with the appropriate instructor when there is any question about a particular grade or the instructor's grading policy. Examples of questions that may be discussed include the following:
  - (a) Clarification of the overall grading plan for the course, including relative weights of exams, etc.

- (b) Correction of errors made in grading.
  - (c) Explanation of specific grading questions such as the correct answer to an exam question or the basis for a grade received on a term paper.
2. The student seeking additional clarification or information on matters related to grading should make an appointment with the appropriate Department Chair. Questions such as the following may be answered by the Department Chair:
  - (a) Department policy on grading for a particular course.
  - (b) Departmental attendance policy or an instructor's approved attendance policy.
  - (c) Questions related to differences in interpretations of approved policies.
3. Students seeking further recourse related to a grade received should make an appointment with the Division Dean. The Division Dean should discuss the questions raised with the instructor and the Department Chair, give the student an official interpretation of the grade, and explain the appeals process.
4. Should the student choose to appeal, the process is as follows:
  - (a) The student should make an appeal in writing to the Vice President for Student Affairs stating the sequence of events leading to his appeal and any personal interpretations related to the case. This written appeal must be made not later than the mid-term of the semester following the semester in which the grade was received.
  - (b) The Vice President for Student Affairs notifies the instructor that an appeal has been made and activates a committee to hear the student's appeal.  
Membership of the committee is as follows:
    - Vice President for Student Affairs
    - Vice President for Academic Affairs
    - An instructor from the department involved, selected by the instructor's Department Chair. (The Vice President for Academic Affairs will select an instructor from another department within the division if the Department Chair's grading policy is appealed.)
    - A faculty member selected by the student making the appeal.
    - An instructor selected by the instructor whose grade is being appealed.
    - An instructor selected by the chairperson of the Faculty Senate. This instructor should be a member of the Senate from a division other than the one in which the appeal is made.
    - One additional instructor may be selected by the Vice President for Student Affairs if needed to insure a balanced representation.
5. A meeting of the Appeals Committee is scheduled by the Vice President for Student Affairs.
  - (a) The committee examines the evidence and discusses the case with the instructor and the student.
  - (b) The committee arrives at a decision, which is sent as a commendation to the instructor. (The student and Vice President for Student Affairs are also informed of the recommendation.)
  - (c) If the recommendation of the committee is not followed by the instructor,



the Executive Committee of the President's Cabinet will determine the appropriate course of action.

(d) In all cases, the faculty member has recourse through the normal channel of appeal.

6. After the Grade Appeal Committee has heard the student's complaint, this completes the appeal process.

LETTER GRADE SYSTEM

Factors upon which the final grade may be based are attendance, recitation, written and oral quizzes, reports, papers, final examination, and other class activities. At the beginning of each course, it is the responsibility of the instructor to notify students in writing about the grading practices that will be used. The evaluation will be expressed according to the following letter system:

Grades		Quality Points
A	Superior	4 per semester hour
B	Above Average	3 per semester hour
C	Average	2 per semester hour
D	Below Average	1 per semester hour
F	Failure	0 per semester hour
CE	Credit by Examination	0 per semester hour
I	Incomplete	0 per semester hour
WA	Withdrawal with prior attendance	0 per semester hour
AU	Audit	0 per semester hour
X	No grade reported by instructor	0 per semester hour
TR	Transferred credit	0 per semester hour
TP	Tech Prep transferred credit	0 per semester hour
S	Satisfactory	0 per semester hour
NS	Did not attend at all (No Show)	0 per semester hour
IP	In Progress (developmental classes)	0 per semester hour
E	Excluded grade (Academic Forgiveness)	0 per semester hour

FURTHER EXPLANATION OF GRADES

Grades preceded by an "R" on the grade report indicate the course has been repeated. No quality points are calculated for course grades proceeded by an "R."

Grades preceded by an "E" on the grade report indicate excluded grades (Academic Forgiveness Policy) No quality points are calculated for course grades preceded by an "E."

TR Grade - The "TR" grade is assigned to credits accepted in transfer, or other credits granted. The grade authorizes credit without further qualification of student per-

formance. The “TR” grade does not affect a student’s grade point average in any way and is not used in determining whether a student qualifies to graduate with academic honors.

**I Grade** - When a student fails to complete the requirements of a course, the student may be given an “Incomplete” or “I” grade. To be awarded this grade, the student must present to the instructor valid reasons for not having completed the course requirements. The instructor and the student then complete an Incomplete Grade Agreement form. This agreement will determine the requirements for a course grade, which must be completed by the twelfth week of the next semester. The grade “I” is not computed into the grade point average until it is replaced by a permanent grade. If the incomplete is not removed by the twelfth week of the semester, an “F” will be assigned by the Office of the Registrar.

**WA Grade** – A “WA” is assigned to a student who wishes to withdraw from a course or courses within the first eleven weeks of the semester and who has previously attended one or more class meetings. WA grades do not count toward hours attempted, and therefore do not affect the student’s grade point average. A student who wishes to withdraw from a course or courses must follow the official procedure, which is initiated in the Office of the Registrar. (See “Withdrawal Process.”)

**AU Grade** - Students who wish to audit courses (see “Auditing a Course.”) must follow the regular registration procedures and declare the audit status to the course instructor. A student who registers for an audit may not receive a grade or credit hours for the course. The fees are the same as for regular college credit. The decision to audit cannot be reversed.

**S Grade** - The grade of "S" indicates satisfactory progress toward the completion of coursework in nursing assessment courses.

**IP Grade**- A grade of “IP” indicates unsatisfactory progress toward the completion of course work in developmental education courses. The “IP” grade allows a student in a developmental course to continue the course in a subsequent semester until all course requirements are met. The student must re-register for the course in the subsequent semester and the grade will be assigned when the work has been concluded. Exceptions to continue the “IP” into a third semester must have written permission of the Director of Developmental Education.

\* Only course work taken at Gaston College is used in computing grade point averages.



## **SATISFACTORY ACADEMIC PROGRESS**

### **REPEATING A COURSE**

All repeated courses and course attempts will appear on the student's transcript. The cumulative grade point average will be computed to count only the course with the highest grade. Repeated courses include those with grades, audits, withdrawals, and incompletes. A student may not re-enroll for a course in which an incomplete (I) was awarded until that "I" is removed. A student may not re-enroll for a course where credit by examination (CE) has been awarded. Students should also refer to catalog information about repeating courses in the Financial Aid section.

A student may repeat a Gaston College curriculum course for credit up to, but not more than three times within a five-year period. Counting the first attempt and three repeated attempts allowed by policy, a student may take the same class a maximum of four times. Courses may be repeated in order to improve one's cumulative grade point average, to achieve mastery of the course content, or to meet graduation requirements. Students with extenuating circumstances may contact the academic dean and request that an exception to the policy be made. The academic dean must approve all policy exceptions, and the justification for the exception must be filed in the student's permanent record. A denial of a request for a policy exception may be appealed to the President.

In addition, students should read information about repeating courses as it pertains to separate program admission standards, especially in the health sciences. Upon completion of the repeated course, the student must notify the Office of the Registrar.

### **ACADEMIC ALERT/ACADEMIC SUSPENSION**

Any student who maintains less than a 2.00 cumulative grade point average after any given semester is placed on Academic Alert. The Office of the Registrar will notify the student placed on Academic Alert, in writing. A student who is placed on Academic Alert should meet with his/her advisor or a counselor in order to develop a plan for improving his/her grade point average.

If after two successive semesters the Academic Alert status has not been removed, the student will be placed on Academic Suspension and will not be allowed to re-enroll at Gaston College for one semester.

During the period in which a student is placed on Academic Suspension, the student is encouraged to meet with a counselor or advisor in order to develop a plan for improving his/her grade point average. If the student decides to choose another major/degree program, a Change of Major form must be completed by the student and signed by the advisor or counselor and then returned to the Office of the Registrar.

Students who have been academically suspended and who choose to appeal their suspension status can do so by completing the appropriate forms available from the Office of the Registrar. Students are also strongly encouraged to attend one of the Student Success workshops in the Student Services division. Information on the workshop dates and the appeal process are available in the Office of the Registrar.

All written appeals should include a realistic plan to achieve good academic standing, recognition of the problems that have affected the student's academic progress, and a plan to resolve those issues. If the Academic Suspension Appeal Committee approves the appeal, the student will be allowed to register and continue their enrollment at Gaston College on a probationary basis. Gaston College may require additional requirements as a condition of re-admission.

Students who have been academically suspended and who expect to receive any type of financial aid must meet with a financial aid specialist to discuss the possibility of having financial aid re-instated as well as to discuss any other conditions that must be met.

### **ACADEMIC FORGIVENESS**

The Academic Forgiveness Policy allows Gaston College students who have experienced academic difficulty at Gaston College to have one opportunity to have grades below a "C" excluded from the cumulative grade point average (GPA). Academic difficulty is defined as less than a 2.00 cumulative grade point average at Gaston College. This policy provides for raising the cumulative grade point average by excluding all grades of "D" or "F" earned prior to the date of eligibility for Academic Forgiveness. A student may be granted Academic Forgiveness only once.

#### **Criteria for Applying for Academic Forgiveness**

- A student must have been out of school for at least three sequential semesters OR have changed his/her major.
- Grades must reflect at least a 2.00 grade point average in at least 12 semester hours in the new major before a student is eligible to apply for Academic Forgiveness.

#### **Procedures for Academic Forgiveness**

- Students who are interested in applying for Academic Forgiveness must obtain the Academic Forgiveness Petition and information from the Office of the Registrar.
- Once completed by the student, the Office of the Registrar will review the petition to determine basic eligibility. Eligible petitions will be forwarded to the student's divisional dean for review and a final decision.
- The student's divisional dean will act upon the petition and return it to the Office of the Registrar.
- If forgiveness is approved, the Office of the Registrar will notify the student of the decision and include an updated student transcript, which will reflect the excluded grades.



- The new GPA calculation on the updated student transcript will exclude all “D” and/or “F” grades. All other grades that are “A,” “B,” and/or “C” will be included in the GPA calculation and will count toward graduation requirements unless other policies supersede this policy.
- The student’s GPA will be calculated based upon the date of eligibility and all criteria being met. The excluded courses will remain on the student’s transcript but will not count toward program/graduation requirements or be calculated in the student’s grade point average. No courses are removed from the transcript. If Academic Forgiveness is approved, the excluded course grades will be preceded by an “E” on the student’s transcript.
- If forgiveness is denied, the Office of the Registrar will notify the student with a letter of explanation.
- Review and processing of Academic Forgiveness generally takes two to four weeks.

## **Exclusions and Limitations of Academic Forgiveness**

- Any credits for courses earned with a grade of “D” are not retained.
- Students who plan to transfer to another college or university should know that the receiving institution is not required to disregard the excluded course grades. Once approved, Academic Forgiveness cannot be reversed.
- The minimum grade point average needed for admission for specific programs may or may not utilize the new grade point average.
- Financial Aid policies regarding Satisfactory Academic Progress are still applicable. Students who receive any type of financial aid should contact the Office of Financial Aid prior to applying for Forgiveness.

## **GROUND FOR STUDENT DISMISSAL**

Academic standards and compliance with accreditation and legal requirements are maintained, in part, through regulations and policies related to student behavior both in and out of the classroom, that is, matriculation for scholarly pursuit and citizenship. The college has the right to dismiss a student in violation of regulations or policies. A student may be dismissed from a course or a program under academic regulations or from the college for violations of citizenship regulations.

Dismissal from Gaston College for academic reasons may be initiated by a faculty member, department chair, division dean, or the student’s advisor upon petition to the Vice President for Academic Affairs. Academic dismissal based upon the concept of “Satisfactory Progress” in a specific course or program is stated in terms of minimum grades; completion of course sequences; and the achievement of certain knowledge, skills, and abilities.

Reinstatement of a dismissed student is possible only by permission of the Vice President for Academic Affairs. Note: Dismissal is to be distinguished from Academic Alert. Academic Alert is a temporary sanction administered by the student’s advisor or the department chair in terms of a “Satisfactory Progress” statement.

That department chair establishes the condition of the alert, that is, duration, remediation, and proficiency demonstration. Appeal of an alert is presented to the Vice President for Academic Affairs by the division dean.

**DISMISSAL FROM AN OCCUPATIONAL PROGRAM**

If the department chair determines that a student is not a safe and dependable practitioner in the lab, shop, clinic, or field area in the progress of a course, the student may be dismissed from the program with the concurrence of the Vice President for Academic Affairs through the due process procedure. By virtue of the fact that certain courses of many occupational programs are offered in a one or two-year sequential pattern and are offered only once during the sequence, a student has no opportunity to repeat one of these courses or to elect a substitute course. Therefore, a student who fails one of these courses will be dismissed from the program at the end of the semester in which the failure occurs.

Students dismissed from an occupational program under this policy may petition for re-admission in a later class.

**HONORS LISTS**

**President’s List**

The President’s List is an honor roll for students who earn a grade point average of 4.00 on 12 or more semester hours of work (not including CE credits) in any given semester and with no Withdrawals or Incompletes recorded.

**Dean’s List**

The Dean’s List is an honor roll for students who earn a grade point average of 3.50-3.99 on 12 or more semester hours of work (not including CE credits) in any given semester and with no grade lower than a “B” and no Withdrawals or Incompletes recorded.

**Honor’s List**

The Honor’s List is an honor roll for part-time students who earn a grade point average of 3.50 or higher on 6 to 11 semester hours of work (not including CE credits) in any given semester and with no Withdrawals or Incompletes recorded.

**CATALOG OF RECORD**

A student who is in continuous attendance (summer semester excluded) may graduate under the provisions of the catalog in effect on his/her date of entry provided the courses are still offered or he/she may choose to meet the requirements of a subsequent issue. A student not enrolled for a period of two consecutive semesters must graduate under the provision of the catalog in effect on his/her last re-entry date. A student who changes programs must meet the requirements of the catalog in effect at the time of the change of program.



## **GRADUATION**

Requirements for degree, diploma, or certificate will vary according to the curriculum. Students should refer to their particular program requirements.

- A 2.00 grade point average is required for graduation.
- At least 20 semester credit hours for an associate degree or diploma must be completed in attendance at Gaston College.
- Courses numbered less than 100 do not count for credit towards graduation.

It is the responsibility of the student to ensure that all course and graduation requirements are met.

### **GRADUATION PROCESS AND PROCEDURES**

Students are required to complete and submit a graduation application for degrees and diplomas to the Office of the Registrar. The application deadlines are listed in the Gaston College Calendar. Graduation applications received after the deadlines are not accepted. A graduation fee of \$45.00 is charged to each graduating student. The specific date of the commencement ceremony is listed in the Gaston College Calendar. Degrees and diplomas will be ordered and transcripts will be updated each semester to reflect completion for students that submit the application for graduation before the deadline each semester. Students that complete requirements in the summer and fall semesters will be given the opportunity to "walk" in the spring ceremony.

### **GRADUATION WITH HONORS**

Gaston College recognizes excellent scholarship by designating the status of "Honors" or "High Honors" to selected graduates receiving associate degrees or diplomas. To be eligible for graduation with "Honors," a student must have a cumulative grade point average of 3.50 or above but below 3.80 on all Gaston College work attempted through the semester prior to graduation.

To be eligible for graduation with "High Honors," a student must have a cumulative grade point average of 3.80 or above on all Gaston College work attempted through the semester prior to graduation.

### **GRADUATION MARSHALS**

Students who have completed at least 32 semester hours in a degree or diploma program at Gaston College and who have maintained the highest scholastic averages are honored by being asked to serve as graduation marshals.



# POLICIES, PROCEDURES







# Gaston College

Opportunities For Life

2006-2008 Gaston College Academic Catalog

## VII. Student Services

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## STUDENT SERVICES

# COUNSELING AND CAREER DEVELOPMENT CENTER

The Counseling and Career Development Center provides academic, career, and personal counseling services and academic advising to Gaston College students. The center also provides assessment (aptitude, interest, personality, and values inventories), college transfer information, disability services, and academic placement testing. The center is located on the second floor of the Myers Center. All services are free and confidential.

## Counseling Services

The counseling staff provides professional counseling services. Students are invited to visit a member of the counseling staff to discuss career, academic, and personal concerns. Concerns may range from personal, family, educational, career or crisis issues. Students may be referred to local community resources when warranted.

## Career Services

The counseling staff provides career guidance to students who need help deciding on a career direction. Interest inventories and computerized assessment instruments are available to assist students in making career decisions. Resources are available that provide information on training and course requirements, work conditions, salaries and employment outlook, resume development, and interviewing strategies.

## Academic Advisement

The majority of new students enrolling at Gaston College are advised by the counseling staff during their first semester. Academic advising is an integral part of student success. It is recommended that students meet with a counselor or faculty advisor on a regular basis to review plans and progress.

## Disability Services

The Counseling and Career Development Center will assist and advise students, with documented disabilities, in arranging academic support services and reasonable accommodations. Services are arranged on an individual basis, specific to the student's needs. The Counseling Center's goal is to provide documented and disabled students with the necessary accommodations in order to compete on an equal basis in the classroom with their peers. Students must register with the Counseling Center and provide the necessary documentation prior to receiving services and reasonable accommodations. Services and accommodations include, but are not limited to: (1) priority registration; (2) assistance in securing note takers; (3) readers; (4) alternative testing accommodations; (5) access to assistive technology equipment; (6) referrals for tutorial services; (7) interpreting services for deaf and hearing impaired students; (8) individual counseling and advocacy assistance; and (9) referrals to human service agencies.



The Counseling Center also serves as a resource to students, faculty, and staff on issues related to compliance with the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973. For further information on services, contact the Counselor for Special Needs (704) 922-6224. The Counseling Center is located on the 2nd floor of the Myers Center.

## **STUDENT ACTIVITIES**

Gaston College recognizes the value of student activities. The college provides a well balanced program developed in response to student requests and needs.

A large measure of responsibility for campus affairs is with the Student Government Association (SGA). The students plan and present many co-curricular campus activities. Activities vary from semester to semester depending upon student choice. Participation in college governance by students may include membership on numerous college and campus committees. More information about student activities is available in the Office of the Coordinator of Student Programs.

## **STUDENT IDENTIFICATION CARD**

- Each student will receive a Gaston College photo ID card that is non-transferable and void unless validated for the current term.
- Loss or theft of a Gaston College photo ID card should be reported within 24 hours to the Chief of Campus Police. The cost for a replacement ID card is \$10.00.

## **COLLEGE BOOKSTORES**

The Dallas Campus Bookstore is located in the Myers Center, and provides textbooks, study-aids, school/office supplies, and computer software as a service to students, faculty/staff and the community at-large. Hours are: Monday-Thursday 8:00 a.m.-7:00 p.m. and Friday 8:00 a.m.- 4:00 p.m. When classes are not in session, the bookstore will open at 8:00 a.m. and close at 4:00 p.m. each day. Contact the Dallas Campus Bookstore at (704) 922-6428. Used books in good condition can be sold to the bookstores during the book buyback held the last three days of each semester at the Dallas Bookstore only.

The Lincoln Campus Bookstore provides textbooks and supplies for course offerings at this site. The hours for the Lincoln Campus are: 8:00 a.m. - 5:00 p.m. Monday thru Thursday and 8:00 a.m. - 3:00 p.m. on Friday. You may contact the Lincoln Campus Bookstore at (704) 748-1075.

**Refund Policy**

Textbooks-Full refunds are given each semester during the first ten days of the current semester or ten days from the date of purchase. Proof of purchase must accompany all returns. Returned textbooks must be unmarked and in re-saleable condition. Bundled textbooks cannot be unwrapped.

Refunds are NOT given on community education, continuing education, corporate education, adult high school books, or textbooks purchased for a previous semester. Also, no refunds are given on supplies, gifts, or non-textbook items.

**WSGE 91.7 FM RADIO STATION**

Studios and transmitter for our non-commercial, public station are located on the Dallas Campus. WSGE is known for its eclectic programming, offering listeners a mix of Adult Alternative, Americana, Blues, Beach, Shag and deep-cut Rock. The station also serves as a source for local news and information.

**EARLY CHILDHOOD DEVELOPMENT CENTER**

The Early Childhood Development Center on the campus of Gaston College provides year-round child care in a creative learning environment for children ages six weeks to five years. In addition, the Center serves as a learning lab for Early Childhood Education students. Children of faculty, staff, students, and the community are accepted and enrolled according to the date of application and availability of space. The center is open Monday through Friday, 7:30 a.m. to 5:30 p.m.

**FOOD SERVICE/VENDING**

The Gaston College Café is located in the Myers Center Building next to the bookstore. The hours of operation are Monday – Friday, 7:00 a.m. – 1:30 p.m. Hot meals, sandwiches and beverages are available during this time. Also, vending machines are located throughout the campus in most buildings.

The Gaston College Lincoln Campus has vending machines in the student lounge.

**HOUSING**

Gaston College is a commuter institution designed to serve residents of the surrounding area and does not provide dormitories and housing for its students.





# Gaston College

Opportunities For Life

2006-2008 Gaston College Academic Catalog

## VIII. College Transfer Associate Degree Programs

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## ELECTIVES

The following courses have been approved as electives for transfer degrees.

ACC 120	Prin. of Accounting I	COM 110	Intro. To Communication
ACC 121	Prin. of Accounting II	COM 120	Interpersonal Communic.
		COM 231	Public Speaking
ANT 210	General Anthropology	CSC 120	Computing Fund. I
ANT 220	Cultural Anthropology	CSC 130	Computing Fund. II
ANT 221	Comparative Cultures	CSC 134	C++ Programming
ANT 230	Physical Anthropology	CSC 136	FORTRAN Program.
ANT 230A	Physical Anthropol. Lab	CSC 148	JAVA Programming
ANT 240	Archaeology	CSC 220	Machine Implemen.
All art courses have been approved as electives for transfer degrees.		DFT 170	Engineering Graphics
AST 111	Descriptive Astronomy	ECO 151	Survey of Economics
AST 111A	Descriptive Astron. Lab	ECO 251	Prin. Of Microeconomics
		ECO 252	Prin. Of Macroeconomics
BIO 110	Principles of Biology	EDU 216	Foundations of Education
BIO 111	General Biology I	ENG 125	Creative Writing I
BIO 112	General Biology II	ENG 131	Intro. To Literature
BIO 120	Intro. Botany	ENG 231	Amer. Literature I
BIO 130	Intro. Zoology	ENG 232	Amer. Literature II
BIO 140	Environmental Biology	ENG 241	British Literature I
BIO 140A	Environ. Biology Lab	ENG 242	British Literature II
BIO 146	Regional Natural History	ENG 272	Southern Literature
BIO 150	Gen. in Human Affairs	ENG 273	African-American Lit.
BIO 155	Nutrition	ENG 274	Literature by Women
BIO 163	Basic A & P I	FRE 111	Elementary French I
BIO 165	A & P I	FRE 112	Elementary French II
BIO 166	A & P II	FRE 141	Culture and Civilization
BIO 165 & 166 must be taken at the same school to transfer.		FRE 151	Francophone Literature
BIO 168	A & P I	FRE 161	Cultural Immersion
BIO 169	A & P II	FRE 211	Intermediate French I
BIO 150	Genetics in Human Affairs	FRE 212	Intermediate French II
BIO 175	General Microbiology	GEL 111	Intro. Geology
BIO 250	Genetics	GEL 113	Historical Geology
BIO 271	Pathophysiology	GEL 120	Physical Geology
BIO 275	Microbiology	GEL 230	Environmental Geology
BIO 280	Biotechnology	GEO 110	Intro to Geography
BUS 110	Intro. to Business	GEO 111	World Regional Geo.
BUS 115	Business Law I	GEO 112	Cultural Geography
BUS 228	Business Statistics	GEO 113	Economic Geography
CHM 130	Gen. Org. & Biochem.	GEO 130	Gen. Physical Geography
CHM 130A	Gen. Org. & Biochem. Lab	GEO 131	Physical Geography I
CHM 131	Intro. To Chemistry	GEO 132	Physical Geography II
CHM 131A	Intro. To Chem. Lab	GER 111	Elementary German I
CHM 132	Org. and Biochemistry	GER 112	Elementary German II
CHM 151	General Chemistry I	HEA 110	Personal Health & Well.
CHM 152	General Chemistry II	HEA 112	First Aid and CPR
CHM 251	Organic Chemistry I	HIS 111	World Civilizations I
CHM 252	Organic Chemistry II	HIS 112	World Civilizations II
CHM 261	Quantitative Analysis	HIS 114	Comparative World His.
CIS 110	Intro. To Computers	HIS 115	Intro. To Global History
CIS 115	Intro. Program. & Logic	HIS 116	Current World Problems
CJC 111	Intro. To Criminal Justice	HIS 121	Western Civilizations I
CJC 121	Law Enforcement Oper.	HIS 122	Western Civilizations II
CJC 141	Corrections		



HIS 131	American History I
HIS 132	American History II
HIS 161	Science & Technology
HIS 162	Women and History
HIS 211	Ancient History
HIS 212	Medieval History
HIS 213	Modern Europe to 1815
HIS 214	Mod. Europe Since 1815
HIS 221	African-Amer. History
HIS 236	North Carolina History

HUM 110	Technology and Society
HUM 115	Critical Thinking
HUM 120	Cultural Studies
HUM 121	The Nature of America
HUM 122	Southern Culture
HUM 130	Myth in Human Culture
HUM 150	Amer. Women's Studies
HUM 160	Introduction to Film
HUM 211	Humanities I
HUM 212	Humanities II
HUM 220	Human Val. & Meaning

MAT 140	Survey of Mathematics
MAT 151	Statistics I
MAT 151A	Statistics I Lab
MAT 155	Statistical Analysis
MAT 155A	Stats. Analysis Lab
MAT 161	College Algebra
MAT 161A	College Algebra Lab
MAT 167	Discrete Math.
MAT 175	Precalculus
MAT 175A	Precalculus Lab
MAT 252	Statistics II
MAT 252A	Statistics II Lab
MAT 263	Brief Calculus
MAT 263A	Brief Cal. Lab
MAT 271	Calculus I
MAT 272	Calculus II
MAT 273	Calculus III
MAT 280	Linear Algebra
MAT 285	Differential Equations

All music courses have been approved as electives for transfer degrees.

All PE courses have been approved as electives for transfer degrees.

PHI 210	History of Philosophy
PHI 215	Philosophical Issues
PHI 220	Western Philosophy I
PHI 221	Western Philosophy II
PHI 230	Intro. To Logic
PHI 240	Intro. To Ethics
PHI 250	Philosophy of Science

PHS 110	Basic Physical Science
PHS 130	Earth Science
PHS 140	Weather and Climate

PHY 110	Conceptual Physics
PHY 110A	Conceptual Physics Lab
PHY 151	College Physics I
PHY 152	College Physics II
PHY 251	General Physics I
PHY 252	General Physics II
PHY 253	Modern Physics

POL 110	Intro to Political Science
POL 120	American Government
POL 130	State & Local Government
POL 210	Comparative Gov.
POL 220	International Relations

PSY 150	General Psychology
PSY 211	Psych. Of Adjustment
PSY 237	Social Psychology
PSY 239	Psycho. of Personality
PSY 241	Dev. Psychology
PSY 243	Child Psychology
PSY 246	Adolescent Psychology
PSY 249	Psychology of Aging
PSY 259	Human Sexuality
PSY 281	Abnormal Psychology

REL 110	World Religions
REL 111	Eastern Religions
REL 112	Western Religions
REL 211	Intro. to Old Testament
REL 212	Intro. to New Testament
REL 221	Religion in America

SOC 210	Intro. To Sociology
SOC 213	Soc. of the Family
SOC 215	Group Processes
SOC 220	Social Problems
SOC 225	Social Diversity
SOC 230	Race & Ethnic Relations
SOC 240	Social Psychology
SOC 242	Sociology of Deviance

SPA 111	Elementary Spanish I
SPA 112	Elementary Spanish II
SPA 141	Culture & Civilization
SPA 151	Hispanic Literature
SPA 161	Cultural Immersion
SPA 181	Spanish Lab 1
SPA 211	Intermediate Spanish I
SPA 212	Intermediate Spanish II

Revised June 13, 2005

**Students are strongly urged to re-take classes in which D's are made.**

**The Comprehensive Articulation Agreement enables Gaston College graduates who are admitted to UNC institutions to transfer with junior status. Graduates must earn a grade of C or better in approved transfer courses.**

Example of a Two-Year Schedule  
For the Associate in Arts Degree:  
For Students Taking Developmental Courses

FALL, FRESHMAN YEAR		
Course Prefix/Number/Title	SHC	
ENG 090 Composition Strateg.	3	
ENG 090A Comp. Strat. Lab	1	
MAT 060 Essential Math	4	
RED 090 Improv. College Read	4	
ACA 118 College Study Skills	2	
Total	14	

SPRING, FRESHMAN YEAR		
Course Prefix/Number/Title	SHC	
ENG 111 Expository Writing	3	
MAT 070 Introductory Algebra	4	
Humanities/Fine Arts core course	3	
Social/Behavioral Science core	3	
History Core Course	3	
Total	16	

1st SUMMER

Course Prefix/Number/Title	SHC	
ENG 112 Arg-Based Research	3	
MAT 080 Intermediate Algebra	4	
Transferable elective	3	
Total	10	

FALL, SOPHMORE YEAR		
Course Prefix/Number/Title	SHC	
Literature core course	3	
Social/Behavioral Science course	3	
College Algebra	3	
College Algebra Lab	1	
Transferable elective	3	
Transferable elective	3	
Total	16	

SPRING, SOPHMORE YEAR		
Course Prefix/Number/Title	SHC	
Humanities/Fine Arts core course	3	
Social/Behavioral Science core	3	
Natural Science core course	4	
Transferable elective	3	
Transferable elective	3	
Transferable elective	3	
Total	19	

2nd SUMMER

Course Prefix/Number/Title	SHC	
Humanities/Fine Arts core course	3	
MAT 151 Statistics I	3	
MAT 151A Statistics I Lab	1	
Natural Science Core	4	
Total	11	

Total 64-65 SHC

\*2 Math Lab hours would add into elective hours



Example of a Two-Year Schedule for the Associate in Arts Degree:

FALL, FRESHMAN YEAR		SPRING, FRESHMAN YEAR	
Course Prefix/Number/Title	SHC	Course Prefix/Number/Title	SHC
ENG 111 Expository Writing	3	ENG 112 Arg-Based Research	3
MAT 161 College Algebra	3	MAT 151 Statistics I	3
*MAT 161A College Algebra Lab	1	*MAT 151A Statistics I Lab	1
Humanities/Fine arts core course	3	Humanities/Fine Arts course	3
History core course	3	Social/Behavioral Science core	3
Transferable elective	3	Transferable elective	3-4
Total	16	Total	16-17

FALL, SOPHMORE YEAR		SPRING, SOPHMORE YEAR	
Course Prefix/Number/Title	SHC	Course Prefix/Number/Title	SHC
Literature core course	3	Humanities/Fine Arts core course	3
Social/Behavioral Science course	3	Social/Behavioral Science course	3
Natural Science core course	4	Natural Science core course	4
Transferable elective	3	Transferable elective	3
Transferable elective	3	Transferable elective	3-4
Total	16	Total	16-17

Total 64-66 SHC  
 \*2 Math Lab hours would add into elective hours

Example of a Two-Year Schedule for the Associate in Science Degree:

FALL, FRESHMAN YEAR		SPRING, FRESHMAN YEAR	
Course Prefix/Number/Title	SHC	Course Prefix/Number/Title	SHC
ENG 111 Expository Writing	3	ENG 112 Arg-Based Research	3
Humanities/Fine Arts core course	3	MAT 175 Precalculus	4
History Core Course	3	MAT 175A Precalculus Lab*	1
Transferable Math/Science elective	4	Humanities/Fine Arts core course	3
Transferable elective	3	Transferable Math/Science elective	4
Total	16	Total	15

FALL, SOPHMORE YEAR		SPRING, SOPHMORE YEAR	
Course Prefix/Number/Title	SHC	Course Prefix/Number/Title	SHC
Literature core course	3	Social/Behavioral Science course	3
Social/Behavioral Science course	3	Natural Science core course	4
Natural Science core course	4	(2nd of two-course sequence)	
(1st of two-course sequence)		Transferable Math/Science elective	4
MAT 271 Calculus I	4	Math or Science core course	4
Transferable Math/Science elective	4		
Total	18	Total	15

Total 64 SHC

\* MAT 175A will add in to elective hours.  
 Note: 14 elective hours must be from transferable Science, Math, or professional area.

ASSOCIATE IN ARTS

(A10100)

The Associate in Arts degree shall be granted for planned programs of study consisting of a minimum of 64 and a maximum of 65 semester hours of approved college transfer courses. Within the degree program, the college shall include opportunities for the achievement of competence in reading, writing, oral communications, fundamental mathematical skills, and the basic use of computers.

	Title	Class	Lab	Clinical	Work	Credits
General Education Courses (44SHC)*						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
<b>ENG 111 is required.</b> Students will only receive credit for one of the following: ENG 112, ENG 113 or ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Argument-Based Research	3	0	0	0	3
ENG 113	Literature-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b> Only one course may be taken in the communication discipline.						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 120	Interpersonal Commun.	3	0	0	0	3
Or						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Introduction to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elementary French I	3	0	0	0	3
FRE 112	Elementary French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elementary Spanish I	3	0	0	0	3
SPA 112	Elementary Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
HUM 115	Critical Thinking	3	0	0	0	3
HUM 160	Introduction to Film	2	2	0	0	3



**MUSIC**

MUS	110	Music Appreciation	3	0	0	0	3
MUS	112	Introduction to Jazz	3	0	0	0	3
MUS	113	American Music	3	0	0	0	3

**PHILOSOPHY**

PHI	210	History of Philosophy	3	0	0	0	3
PHI	215	Philosophical Issues	3	0	0	0	3
PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Intro to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Testament	3	0	0	0	3
REL	212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas. **At least one course must be a history course.**

**ANTHROPOLOGY**

ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology Lab	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO	151	Survey of Economics	3	0	0	0	3
ECO	251	Prin. of Microeconomics	3	0	0	0	3
ECO	252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL	110	Intro Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	210	Comparative Government	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC	210	Introduction to Sociology	3	0	0	0	3
SOC	213	Sociology of the Family	3	0	0	0	3

SOC	220	Social Problems	3	0	0	0	3
SOC	225	Social Diversity	3	0	0	0	3
SOC	230	Race and Ethnic Relations	3	0	0	0	3
SOC	240	Social Psychology	3	0	0	0	3

**GEOGRAPHY**

GEO	111	World Geography	3	0	0	0	3
GEO	112	Cultural Geography	3	0	0	0	3
GEO	130	Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

*Mathematics (6 SHC):* **MAT 161 and MAT 161A are required.** The other unit may be selected from among other quantitative subjects, such as computer science and statistics. Select at least one course from each series:

**ASTRONOMY**

AST	111	Descriptive Astronomy	3	0	0	0	3
AST	111A	Descriptive Astronomy Lab	0	2	0	0	1

**BIOLOGY**

BIO	110	Principles of Biology	3	3	0	0	4
BIO	111	General Biology I	3	3	0	0	4
BIO	112	General Biology II	3	3	0	0	4
BIO	120	Introductory Botany	3	3	0	0	4
BIO	130	Introductory Zoology	3	3	0	0	4
BIO	140	Environmental Biology	3	0	0	0	3
BIO	140A	Environmental Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM	131	Introduction to Chemistry	3	0	0	0	3
CHM	131A	Intro. to Chemistry Lab	0	3	0	0	1
CHM	132	Organic and Biochemistry	3	3	0	0	4
CHM	151	General Chemistry I	3	3	0	0	4
CHM	152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL	111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY	110	Conceptual Physics	3	0	0	0	3
PHY	110A	Conceptual Physics Lab	0	2	0	0	1
PHY	151	College Physics I	3	2	0	0	4
PHY	152	College Physics II	3	2	0	0	4

**MATHEMATICS (required)**

MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1

**Select one of the following:**

CIS	115	Intro to Prog. & Logic	2	2	0	0	3
Or							
MAT	151	Statistics I	3	0	0	0	3
MAT	151A	Statistics Lab	0	2	0	0	1
Or							
MAT	263	Brief Calculus	3	0	0	0	3
MAT	263A	Brief Calculus Lab	0	2	0	0	1



Hours from mathematics labs will be applied towards Other Required Hours explained below.

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

**Total Semester Hours Credit:** 64-65

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*

# ASSOCIATE IN ARTS

Pre-Major: Art Education  
(A1010A)

Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>					
<b>ENGLISH COMPOSITION (6 SHC)</b>					
<b>ENG 111 is required.</b> Students will only receive credit for one of the following: ENG 112, ENG 113 or ENG 114.					
ENG 111 Expository Writing	3	0	0	0	3
ENG 112 Argument-Based Research	3	0	0	0	3
ENG 113 Literature-Based Res.	3	0	0	0	3
ENG 114 Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>					
<b>ART 114 and 115 are required.</b> At least one course must be a literature course. The fourth course must be chosen from one of the other disciplines. Only one course may be taken in the communication discipline.					
<b>ART</b>					
ART 114 Art History Survey I	3	0	0	0	3
ART 115 Art History Survey II	3	0	0	0	3
<b>COMMUNICATION</b>					
COM 120 Interpersonal Commun.	3	0	0	0	3
Or					
COM 231 Public Speaking	3	0	0	0	3
<b>ENGLISH</b>					
ENG 131 Introduction to Literature	3	0	0	0	3
ENG 231 American Literature I	3	0	0	0	3
ENG 232 American Literature II	3	0	0	0	3
ENG 241 British Literature I	3	0	0	0	3
ENG 242 British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>					
FRE 111 Elementary French I	3	0	0	0	3
FRE 112 Elementary French II	3	0	0	0	3
GER 111 Elementary German I	3	0	0	0	3
GER 112 Elementary German II	3	0	0	0	3
SPA 111 Elementary Spanish I	3	0	0	0	3
SPA 112 Elementary Spanish II	3	0	0	0	3
SPA 211 Intermediate Spanish I	3	0	0	0	3
SPA 212 Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>					
HUM 110 Technology and Society	3	0	0	0	3
HUM 115 Critical Thinking	3	0	0	0	3
HUM 160 Introduction to Film	2	2	0	0	3
<b>MUSIC</b>					
MUS 110 Music Appreciation	3	0	0	0	3
MUS 112 Introduction To Jazz	3	0	0	0	3
MUS 113 American Music	3	0	0	0	3
<b>PHILOSOPHY</b>					
PHI 210 History of Philosophy	3	0	0	0	3
PHI 215 Philosophical Issues	3	0	0	0	3
PHI 220 Western Philosophy I	3	0	0	0	3



PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Intro to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Testament	3	0	0	0	3
REL	212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas. **At least one course must be a history course.**

**ANTHROPOLOGY**

ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology Lab	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO	151	Survey of Economics	3	0	0	0	3
ECO	251	Prin. of Microeconomics	3	0	0	0	3
ECO	252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL	110	Intro Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	210	Comparative Government	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC	210	Introduction to Sociology	3	0	0	0	3
SOC	213	Sociology of the Family	3	0	0	0	3
SOC	220	Social Problems	3	0	0	0	3
SOC	225	Social Diversity	3	0	0	0	3
SOC	230	Race & Ethnic Relations	3	0	0	0	3
SOC	240	Social Psychology	3	0	0	0	3

**GEOGRAPHY**

GEO	111	World Geography	3	0	0	0	3
GEO	112	Cultural Geography	3	0	0	0	3
GEO	130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

*Mathematics (6 SHC)*

**ASTRONOMY**

AST 111	Descriptive Astronomy	3	0	0	0	3
AST 111A	Descriptive Astronomy Lab	0	2	0	0	1

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Environmental Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 131	Introduction to Chemistry	3	0	0	0	3
CHM 131A	Intro. to Chemistry Lab	0	3	0	0	1
CHM 132	Organic and Biochemistry	3	3	0	0	4
CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 110	Conceptual Physics	3	0	0	0	3
PHY 110A	Conceptual Physics Lab	0	2	0	0	1
PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS (required)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**Select one of the following:**

CIS 115	Intro to Prog. & Logic	2	2	0	0	3
Or						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1

Hours from mathematics labs will be applied towards Other Required Hours explained below

**OTHER REQUIRED HOURS (20-21 SHC)\***

The following courses are required (9 SHC):

ART 121	Design I	1	4	0	0	3
ART 122	Design II	1	4	0	0	3
ART 131	Drawing I	0	6	0	0	3

**11 additional hours of approved college transfer courses are required.**

To satisfy this requirement, two of the following courses are recommended:

ART 132	Drawing II	0	6	0	0	3
ART 171	Computer Art I	1	4	0	0	3
ART 231	Printmaking I	0	6	0	0	3
ART 240	Painting I	0	6	0	0	3
ART 283	Ceramics I	0	6	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
Or						
ART 117	Non-Western Art History	3	0	0	0	3



ART 247	Jewelry I	0	6	0	0	3
Or						
ART 245	Metals I	0	6	0	0	3
ART 250	Surface Design: Textiles	0	6	0	0	3
ART 261	Photography I	1	4	0	0	3
ART 132 is a prerequisite for the following courses:						
ART 135	Figure Drawing I	0	6	0	0	3
Or						
ART 281	Sculpture I	0	6	0	0	3

Total Semester Hours Credit: 64-65

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*

**ASSOCIATE IN ARTS****Pre-Major: Business Administration**  
(A1010B)

Title		Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44 SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
<b>ENG 111 is required.</b> Students will only receive credit for one of the following: ENG 112, ENG 113 or ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Argument-Based Research	3	0	0	0	3
ENG 113	Literature-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b> Only one course may be taken in the communication discipline.						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 120	Interpersonal Commun.	3	0	0	0	3
Or						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Introduction to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elementary French I	3	0	0	0	3
FRE 112	Elementary French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elementary Spanish I	3	0	0	0	3
SPA 112	Elementary Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
HUM 115	Critical Thinking	3	0	0	0	3
HUM 160	Introduction to Film	2	2	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Introduction To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3
<b>PHILOSOPHY</b>						
PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3



PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Intro to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro. to Old Testament	3	0	0	0	3
REL	212	Intro. to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas. **At least one course must be a history course. ECO 251 is required.**

Courses marked with an \* are recommended.

**ANTHROPOLOGY**

ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology Lab	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3

**ECONOMICS**

ECO	251	Principles of Microecon.	3	0	0	0	3
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**HISTORY**

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL	110	Intro. to Political Science	3	0	0	0	3
*POL	120	American Government	3	0	0	0	3
POL	210	Comparative Government	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

*PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

*SOC	210	Introduction to Sociology	3	0	0	0	3
SOC	213	Sociology of the Family	3	0	0	0	3
SOC	220	Social Problems	3	0	0	0	3
SOC	225	Social Diversity	3	0	0	0	3
SOC	230	Race and Ethnic Relations	3	0	0	0	3
SOC	240	Social Psychology	3	0	0	0	3

**GEOGRAPHY**

GEO	111	World Geography	3	0	0	0	3
GEO	112	Cultural Geography	3	0	0	0	3
GEO	130	Gen. Physical Geography	3	0	0	0	3

NATURAL SCIENCES/MATHEMATICS (14-16 SHC)

*Natural Sciences (8 SHC):* Two courses from the biological and physical science disciplines, including accompanying laboratory work are required. Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

*Mathematics (6 SHC)*

ASTRONOMY

AST 111	Descriptive Astronomy	3	0	0	0	3
AST 111A	Descriptive Astronomy Lab	0	2	0	0	1

BIOLOGY

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Environmental Biology Lab	0	3	0	0	1

CHEMISTRY

CHM 131	Introduction to Chemistry	3	0	0	0	3
CHM 131A	Intro. to Chemistry Lab	0	3	0	0	1
CHM 132	Organic and Biochemistry	3	3	0	0	4
CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

GEOLOGY

GEL 111	Introductory Geology	3	2	0	0	4
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PHYSICS

PHY 110	Conceptual Physics	3	0	0	0	3
PHY 110A	Conceptual Physics Lab	0	2	0	0	1

MATHEMATICS

The following courses are required:

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1
And						
MAT 263	Brief Calculus	3	0	0	0	3
MAT 263A	Brief Calculus lab	0	2	0	0	1

OTHER REQUIRED HOURS (20 SHC)\*

The following courses are required:

ACC 120	Principles of Financial Acct.	3	2	0	0	4
ACC 121	Princ. of Managerial Acct.	3	2	0	0	4
CIS 110	Introduction to Computers	2	2	0	0	3
ECO 252	Princ. Of Macroeconomics	3	0	0	0	3

One of the following is required:

BUS 228	Business Statistics	2	2	0	0	3
Or						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics I Lab	0	2	0	0	1

Three additional hours of approved college transfer courses are required. One of the following are recommended:

BUS 110	Introduction To Business	3	0	0	0	3
BUS 115	Business Law I	3	0	0	0	3

Total Semester Hours Credit:

64-65

\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.



**ASSOCIATE IN ARTS**

**Pre-Major: Business Education and Marketing Education**  
(A1010C)

	Title	Class	Lab	Clinical	Work	Credits
General Education Courses (44SHC)*						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
<b>ENG 111 is required.</b> Students will only receive credit for ENG 112, ENG 113 or ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Argument-Based Research	3	0	0	0	3
ENG 113	Literature-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3

**HUMANITIES/FINE ARTS (12 SHC)**

Select four courses from at least three of the following discipline areas. **At least one course must be a literature course.** Only one course may be taken in the communication discipline.

**ART**

ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3

**COMMUNICATION**

COM 120	Interpersonal Commun.	3	0	0	0	3
Or						
COM 231	Public Speaking	3	0	0	0	3

**ENGLISH**

ENG 131	Introduction to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3

**FOREIGN LANGUAGES**

FRE 111	Elementary French I	3	0	0	0	3
FRE 112	Elementary French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elementary Spanish I	3	0	0	0	3
SPA 112	Elementary Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3

**HUMANITIES**

HUM 110	Technology and Society	3	0	0	0	3
HUM 115	Critical Thinking	3	0	0	0	3
HUM 160	Introduction to Film	2	2	0	0	3

**MUSIC**

MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Introduction To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3

**PHILOSOPHY**

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3

# COLLEGE TRANSFER DEGREE PROGRAMS

PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Introduction to Ethics	3	0	0	0	3
<b>RELIGION</b>							
REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Testament	3	0	0	0	3
REL	212	Intro to New Testament	3	0	0	0	3
<b>SOCIAL/BEHAVIORAL SCIENCES (12 SHC)</b>							
Select four courses from at least three of the following discipline areas. One course must be a history course. ECO 251 is required.							
Courses marked with an * are <u>recommended</u> .							
<b>ANTHROPOLOGY</b>							
ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology Lab	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3
<b>ECONOMICS</b>							
ECO	251	Prin. of Microeconomics	3	0	0	0	3
<b>HISTORY</b>							
HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3
<b>POLITICAL SCIENCE</b>							
POL	110	Intro Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	210	Comparative Government	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3
<b>PSYCHOLOGY</b>							
*PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3
<b>SOCIOLOGY</b>							
*SOC	210	Introduction to Sociology	3	0	0	0	3
SOC	213	Sociology of the Family	3	0	0	0	3
SOC	220	Social Problems	3	0	0	0	3
SOC	225	Social Diversity	3	0	0	0	3
SOC	230	Race and Ethnic Relations	3	0	0	0	3
SOC	240	Social Psychology	3	0	0	0	3
<b>GEOGRAPHY</b>							
GEO	111	World Geography	3	0	0	0	3
GEO	112	Cultural Geography	3	0	0	0	3
GEO	130	Gen. Physical Geography	3	0	0	0	3



**NATURAL SCIENCES/MATHEMATICS (14-15 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

**ASTRONOMY**

AST	111	Descriptive Astronomy	3	0	0	0	3
AST	111A	Descriptive Astronomy Lab	0	2	0	0	1

**BIOLOGY**

BIO	110	Principles of Biology	3	3	0	0	4
BIO	111	General Biology I	3	3	0	0	4
BIO	112	General Biology II	3	3	0	0	4
BIO	120	Introductory Botany	3	3	0	0	4
BIO	130	Introductory Zoology	3	3	0	0	4
BIO	140	Environmental Biology	3	0	0	0	3
BIO	140A	Environmental Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM	131	Introduction to Chemistry	3	0	0	0	3
CHM	131A	Intro. to Chemistry Lab	0	3	0	0	1
CHM	132	Organic and Biochemistry	3	3	0	0	4
CHM	151	General Chemistry I	3	3	0	0	4
CHM	152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL	111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY	110	Conceptual Physics	3	0	0	0	3
PHY	110A	Conceptual Physics Lab	0	2	0	0	1

**MATHEMATICS (required)**

MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1

And

CIS	110	Intro to Computers	2	2	0	0	3
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Hours from Mathematics labs will be applied to Other Required Hours explained below.

**OTHER REQUIRED HOURS (20 SHC)**

**The following are required (7 SHC):**

ACC	120	Principles of Financial Acct.	3	2	0	0	4
ECO	252	Prin. of Macroeconomics	3	0	0	0	3

**One of the following is required (3SHC):**

CIS	115	Intro. to Programming	2	2	0	0	3
CSC	134	C++ Programming	2	3	0	0	3

10 additional hours of approved college transfer courses are required to total 64 SHC.

Three of the following courses are recommended:

ACC	121	Principles Managerial Acct.	3	2	0	0	4
BUS	110	Introduction To Business	3	0	0	0	3
BUS	115	Business Law I	3	0	0	0	3
BUS	228	Business Statistics	2	2	0	0	3

Or

MAT	151	Statistics I	3	0	0	0	3
MAT	151A	Statistics I Lab	0	2	0	0	1

**Total Semester Hours Credit:**

**64-65**

*\*Students must meet the receiving university’s foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*

**ASSOCIATE IN ARTS****Pre-Major: Criminal Justice**  
**(A1010D)**

Title		Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
<b>ENG 111 is required.</b> Students will only receive credit for one of the following: ENG 112, ENG 113 or ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Argument-Based Research	3	0	0	0	3
ENG 113	Literature-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b> Only one course may be taken in the communication discipline.						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 120	Interpersonal Commun.	3	0	0	0	3
Or						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Introduction to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elementary French I	3	0	0	0	3
FRE 112	Elementary French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elementary Spanish I	3	0	0	0	3
SPA 112	Elementary Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
HUM 115	Critical Thinking	3	0	0	0	3
HUM 160	Introduction to Film	2	2	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Introduction to Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3



**PHILOSOPHY**

PHI	210	History of Philosophy	3	0	0	0	3
PHI	215	Philosophical Issues	3	0	0	0	3
PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Introduction to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Testament	3	0	0	0	3
REL	212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

**At least one course must be a history course.**

**HISTORY**

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**The following courses are required:**

**POLITICAL SCIENCE**

POL	120	American Government	3	0	0	0	3
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**PSYCHOLOGY**

PSY	150	General Psychology	3	0	0	0	3
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**SOCIOLOGY**

SOC	210	Introduction to Sociology	3	0	0	0	3
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**Natural Sciences/Mathematics (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

*Mathematics (6 SHC)*

**ASTRONOMY**

AST	111	Descriptive Astronomy	3	0	0	0	3
AST	111A	Descriptive Astronomy Lab	0	2	0	0	1

**BIOLOGY**

BIO	110	Principles of Biology	3	3	0	0	4
BIO	111	General Biology I	3	3	0	0	4
BIO	112	General Biology II	3	3	0	0	4
BIO	120	Introductory Botany	3	3	0	0	4
BIO	130	Introductory Zoology	3	3	0	0	4
BIO	140	Environmental Biology	3	0	0	0	3
BIO	140A	Environmental Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM	131	Introduction to Chemistry	3	0	0	0	3
CHM	131A	Intro. to Chemistry Lab	0	3	0	0	1
CHM	132	Organic and Biochemistry	3	3	0	0	4
CHM	151	General Chemistry I	3	3	0	0	4
CHM	152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 110	Conceptual Physics	3	0	0	0	3
PHY 110A	Conceptual Physics Lab	0	2	0	0	1

**MATHEMATICS (required)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1
And						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1

Hours from mathematics labs will be applied towards Other Required Hours explained below.

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses which have been approved for transfer.

The following courses are required (9SHC):

CJC 111	Intro. to Criminal Justice	3	0	0	0	3
CJC 121	Law Enforcement Oper.	3	0	0	0	3
CJC 141	Corrections	3	0	0	0	3

11 additional hours of approved college transfer courses are required.

**Total Semester Hours Credit: 64-65**



ASSOCIATE IN ARTS

Pre-Major: English  
(A1010E)

Title	Class	Lab	Clinical	Work	Credits
General Education Courses (44SHC)*					
<b>ENGLISH COMPOSITION (6 SHC)</b>					
<b>ENG 111 is required.</b> Students will only receive credit for one of the following: ENG 112, ENG 113 or ENG 114.					
ENG 111 Expository Writing	3	0	0	0	3
ENG 112 Argument-Based Research	3	0	0	0	3
ENG 113 Literature-Based Research	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>					
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b> (A foreign language sequence is recommended.) Only one course may be taken in the communication discipline.					
<b>ART</b>					
ART 111 Art Appreciation	3	0	0	0	3
ART 114 Art History Survey I	3	0	0	0	3
ART 115 Art History Survey II	3	0	0	0	3
ART 116 Survey of American Art	3	0	0	0	3
ART 117 Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>					
COM 120 Interpersonal Commun.	3	0	0	0	3
Or					
COM 231 Public Speaking	3	0	0	0	3
<b>ENGLISH</b>					
ENG 231 American Literature I	3	0	0	0	3
ENG 232 American Literature II	3	0	0	0	3
ENG 241 British Literature I	3	0	0	0	3
ENG 242 British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>					
FRE 111 Elementary French I	3	0	0	0	3
FRE 112 Elementary French II	3	0	0	0	3
OR					
GER 111 Elementary German I	3	0	0	0	3
GER 112 Elementary German II	3	0	0	0	3
OR					
SPA 111 Elementary Spanish I	3	0	0	0	3
SPA 112 Elementary Spanish II	3	0	0	0	3
SPA 211 Intermediate Spanish I	3	0	0	0	3
SPA 212 Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>					
HUM 110 Technology and Society	3	0	0	0	3
HUM 115 Critical Thinking	3	0	0	0	3
HUM 160 Introduction to Film	2	2	0	0	3
<b>MUSIC</b>					
MUS 110 Music Appreciation	3	0	0	0	3
MUS 112 Introduction to Jazz	3	0	0	0	3
MUS 113 American Music	3	0	0	0	3

**PHILOSOPHY**

PHI	210	History of Philosophy	3	0	0	0	3
PHI	215	Philosophical Issues	3	0	0	0	3
PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Introduction to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	198	Seminar in Religion	3	0	0	0	3
REL	211	Intro. to Old Testament	3	0	0	0	3
REL	212	Intro. to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas. **At least one course must be a history course.**

**ANTHROPOLOGY**

ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology Lab	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO	151	Survey of Economics	3	0	0	0	3
ECO	251	Prin. of Microeconomics	3	0	0	0	3
ECO	252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL	110	Intro Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	210	Comparative Government	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC	210	Introduction to Sociology	3	0	0	0	3
SOC	213	Sociology of the Family	3	0	0	0	3
SOC	220	Social Problems	3	0	0	0	3
SOC	225	Social Diversity	3	0	0	0	3
SOC	230	Race and Ethnic Relations	3	0	0	0	3
SOC	240	Social Psychology	3	0	0	0	3



**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111. Students will not be given credit for CHM 131 and CHM 151.

*Mathematics (6 SHC)*

**ASTRONOMY**

AST 111	Descriptive Astronomy	3	0	0	0	3
AST 111A	Descriptive Astronomy Lab	0	2	0	0	1

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Environmental Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 131	Introduction to Chemistry	3	0	0	0	3
CHM 131A	Intro. To Chemistry Lab	0	3	0	0	1
CHM 132	Organic and Biochemistry	3	3	0	0	4
CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 110	Conceptual Physics	3	0	0	0	3
PHY 110A	Conceptual Physics Lab	0	2	0	0	1
PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS (required)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**Select one of the following:**

CIS 115	Introduction to Prog. & Logic	2	2	0	0	3
OR						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

**One of the following courses is required:**

ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3

17 additional hours of approved college transfer courses are required.

One of the following courses is recommended:

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

An intermediate foreign language sequence is recommended:

FRE	211	Intermediate French I	3	0	0	0	3
FRE	212	Intermediate French II	3	0	0	0	3
Or							
SPA	211	Intermediate Spanish I	3	0	0	0	3
SPA	212	Intermediate Spanish II	3	0	0	0	3

Total Semester Hours Credit: 64-65

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*



**ASSOCIATE IN ARTS**

Pre-Major: English Education

(A1010F)

Title	Class	Lab	Clinical	Work	Credits
General Education Courses (44SHC)*					
<b>ENGLISH COMPOSITION (6 SHC)</b>					
<b>ENG 111 is required.</b> Students will only receive credit for one of the following: ENG 112, ENG 113 or ENG 114.					
ENG 111 Expository Writing	3	0	0	0	3
ENG 112 Argument-Based Research	3	0	0	0	3
ENG 113 Literature-Based Research	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>					
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b> (ART 111, HUM 160 or MUS 110 is recommended as well as SPA 111 and 112 or FRE 111 and 112 or GER 111 and 112.) Only one course may be taken in the communication discipline.					
<b>ART</b>					
*ART 111 Art Appreciation	3	0	0	0	3
ART 114 Art History Survey I	3	0	0	0	3
ART 115 Art History Survey II	3	0	0	0	3
ART 116 Survey of American Art	3	0	0	0	3
ART 117 Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>					
COM 120 Interpersonal Communicat.	3	0	0	0	3
Or					
COM 231 Public Speaking	3	0	0	0	3
<b>ENGLISH</b>					
ENG 131 Introduction to Literature	3	0	0	0	3
ENG 231 American Literature I	3	0	0	0	3
ENG 232 American Literature II	3	0	0	0	3
ENG 241 British Literature I	3	0	0	0	3
ENG 242 British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>					
*FRE 111 Elementary French I	3	0	0	0	3
*FRE 112 Elementary French II	3	0	0	0	3
*GER 111 Elementary German I	3	0	0	0	3
*GER 112 Elementary German II	3	0	0	0	3
*SPA 111 Elementary Spanish I	3	0	0	0	3
*SPA 112 Elementary Spanish II	3	0	0	0	3
SPA 211 Intermediate Spanish I	3	0	0	0	3
SPA 212 Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>					
HUM 110 Technology and Society	3	0	0	0	3
HUM 115 Critical Thinking	3	0	0	0	3
*HUM 160 Introduction to Film	2	2	0	0	3
<b>MUSIC</b>					
*MUS 110 Music Appreciation	3	0	0	0	3
MUS 112 Introduction to Jazz	3	0	0	0	3
MUS 113 American Music	3	0	0	0	3

**PHILOSOPHY**

PHI	210	History of Philosophy	3	0	0	0	3
PHI	215	Philosophical Issues	3	0	0	0	3
PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Introduction to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Testament	3	0	0	0	3
REL	212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas. **At least one course must be a history course. PSY 150 is required.** Courses marked with an \* are recommended.

**ANTHROPOLOGY**

ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology Lab	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO	151	Survey of Economics	3	0	0	0	3
ECO	251	Prin. of Microeconomics	3	0	0	0	3
ECO	252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

*HIS	111	World Civilizations I	3	0	0	0	3
*HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL	110	Intro. to Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	210	Comparative Government	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC	210	Introduction to Sociology	3	0	0	0	3
SOC	213	Sociology of the Family	3	0	0	0	3
SOC	220	Social Problems	3	0	0	0	3
SOC	225	Social Diversity	3	0	0	0	3
SOC	230	Race & Ethnic Relations	3	0	0	0	3
SOC	240	Social Psychology	3	0	0	0	3



**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

*Mathematics (6 SHC)*

**ASTRONOMY**

AST 111	Descriptive Astronomy	3	0	0	0	3
AST 111A	Descriptive Astronomy Lab	0	2	0	0	1

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Environmental Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 131	Introduction to Chemistry	3	0	0	0	3
CHM 131A	Intro. To Chemistry Lab	0	3	0	0	1
CHM 132	Organic and Biochemistry	3	3	0	0	4
CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 110	Conceptual Physics	3	0	0	0	3
PHY 110A	Conceptual Physics Lab	0	2	0	0	1
PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**Select one of the following:**

CIS 115	Intro to Program. & Logic	2	2	0	0	3
Or						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab		0	2	0	0

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Hours from mathematics labs will be applied towards Other Required Hours explained below.

OTHER REQUIRED HOURS (20-21 SHC)\*

Must include additional general education and professional courses that have been approved for transfer.

The following course is required (4SHC):

EDU 216	Foundations of Education	3	2	0	0	4
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The following course is recommended:

COM 231	Public Speaking	3	0	0	0	3
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An intermediate foreign language sequence is recommended:

FRE 211	Intermediate French I	3	0	0	0	3
FRE 212	Intermediate French II	3	0	0	0	3
Or						
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3

One of the following courses with multicultural or gender emphasis is recommended:

ENG 272	Southern Literature	3	0	0	0	3
ENG 273	African-American Literature	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 230	Race and Ethnic Relations	3	0	0	0	3

Two additional 200-level survey courses in literature are recommended.

Total Semester Hours Credit: 64

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*



ASSOCIATE IN ARTS

Pre-Major: Health Education  
(A1010G)

Title		Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
<b>ENG 111 is required.</b> Students will only receive credit for one of the following: ENG 112, ENG 113 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Argument-Based Research	3	0	0	0	3
ENG 113	Literature-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b> COM 231 is <u>recommended</u> . Only one course may be taken in the communication discipline.						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 120	Interpersonal Commun.	3	0	0	0	3
Or						
*COM231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elementary French I	3	0	0	0	3
FRE 112	Elementary French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elementary Spanish I	3	0	0	0	3
SPA 112	Elementary Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
HUM 115	Critical Thinking	3	0	0	0	3
HUM 160	Introduction to Film	2	2	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Introduction to Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3

**PHILOSOPHY**

PHI	210	History of Philosophy	3	0	0	0	3
PHI	215	Philosophical Issues	3	0	0	0	3
PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Introduction to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Testament	3	0	0	0	3
REL	212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas. **At least one course must be a history course. PSY 150 is required.**

**ANTHROPOLOGY**

ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology Lab	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO	151	Survey of Economics	3	0	0	0	3
ECO	251	Prin. of Microeconomics	3	0	0	0	3
ECO	252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL	110	Intro Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	210	Comparative Government	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC	210	Introduction to Sociology	3	0	0	0	3
SOC	213	Sociology of the Family	3	0	0	0	3
SOC	220	Social Problems	3	0	0	0	3
SOC	225	Social Diversity	3	0	0	0	3
SOC	230	Race and Ethnic Relations	3	0	0	0	3
SOC	240	Social Psychology	3	0	0	0	3



**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS(14 SHC)**

*Natural Sciences (8 SHC): BIO 111 and 112 or CHM 151 and 152 are required.*

*Mathematics (6 SHC)*

**BIOLOGY**

BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4

Or

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**MATHEMATICS**

The following courses are required:

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

And

CIS 110	Introduction to Computers	2	2	0	0	3
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**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

**The following courses are required (8 SHC):**

HEA 110	Personal Health/Wellness	3	0	0	0	3
HEA 112	First Aid and CPR	1	2	0	0	2
HEA 120	Community Health	3	0	0	0	3

**The following sequence is required:**

BIO 168	Anatomy and Phys. I	3	3	0	0	4
BIO 169	Anatomy and Phys. II	3	3	0	0	4

**The following course is required (4 SHC):**

MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics I Lab	0	2	0	0	1

**Total Semester Hours Credit: 64-65**

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*

ASSOCIATE IN ARTS

Pre-Major: History  
(A1010H)

Title		Class	Lab	Clinical	Work	Credits
General Education Courses (44SHC)*						
ENGLISH COMPOSITION (6 SHC)						
ENG 111 is required. Students will only receive credit for one of the following ENG 112, ENG 113 or ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Argument-Based Research	3	0	0	0	3
ENG 113	Literature-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
HUMANITIES/FINE ARTS (12 SHC)						
Select four courses from at least three of the following discipline areas. At least one course must be a literature course. Only one course may be taken in the communication discipline.						
ART						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
COMMUNICATION						
COM 120	Interpersonal Commun.	3	0	0	0	3
Or						
COM 231	Public Speaking	3	0	0	0	3
ENGLISH						
ENG 131	Introduction to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	3	0	0	0
3						
ENG 242	British Literature II	3	0	0	0	3
FOREIGN LANGUAGES						
FRE 111	Elementary French I	3	0	0	0	3
FRE 112	Elementary French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elementary Spanish I	3	0	0	0	3
SPA 112	Elementary Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
HUMANITIES						
HUM 110	Technology and Society	3	0	0	0	3
HUM 115	Critical Thinking	3	0	0	0	3
HUM 160	Introduction to Film	2	2	0	0	3
MUSIC						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Introduction to Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3



**PHILOSOPHY**

PHI	210	History of Philosophy	3	0	0	0	3
PHI	215	Philosophical Issues	3	0	0	0	3
PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Introduction to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro. to Old Testament	3	0	0	0	3
REL	212	Intro. to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas. **At least one course must be a history course.** HIS 111 and 112 are recommended.

**ANTHROPOLOGY**

ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO	151	Survey of Economics	3	0	0	0	3
ECO	251	Prin. of Microeconomics	3	0	0	0	3
ECO	252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

*HIS	111	World Civilizations I	3	0	0	0	3
*HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL	110	Intro Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	210	Comparative Government	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC	210	Introduction to Sociology	3	0	0	0	3
SOC	213	Sociology of the Family	3	0	0	0	3
SOC	220	Social Problems	3	0	0	0	3
SOC	225	Social Diversity	3	0	0	0	3
SOC	230	Race and Ethnic Relations	3	0	0	0	3
SOC	240	Social Psychology	3	0	0	0	3

**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

*Mathematics (6 SHC):*

**ASTRONOMY**

AST 111	Descriptive Astronomy	3	0	0	0	3
AST 111A	Descriptive Astronomy Lab	0	2	0	0	1

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Environmental Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 131	Introduction to Chemistry	3	0	0	0	3
CHM 131A	Intro. To Chemistry Lab	0	3	0	0	1
CHM 132	Organic and Biochemistry	3	3	0	0	4
CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 110	Conceptual Physics	3	0	0	0	3
PHY 110A	Conceptual Physics Lab	0	2	0	0	1

**MATHEMATICS**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**Select one of the following:**

CIS 115	Intro to Prog. & Logic	2	2	0	0	3
Or						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics I Lab	0	2	0	0	1

Hours from mathematics labs will be applied towards Other Required Hours explained below.

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

The following courses are recommended:

HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

**Total Semester Hours Credit: 64-65**

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*



# ASSOCIATE IN ARTS

Pre-Major: Political Science  
(A1010K)

## COLLEGE TRANSFER DEGREE PROGRAMS

Title	Class	Lab	Clinical	Work	Credits
General Education Courses (44SHC)*					
<b>ENGLISH COMPOSITION (6 SHC)</b>					
<b>ENG 111 is required.</b> Students will only receive credit for one of the following ENG 112, ENG 113 or ENG 114.					
ENG 111 Expository Writing	3	0	0	0	3
ENG 112 Argument-Based Research	3	0	0	0	3
ENG 113 Literature-Based Research	3	0	0	0	3
ENG 114 Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>					
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b> Either FRE 111 and 112 or GER 111 and 112 or SPA 111 and 112 are <u>recommended</u> . COM 231 is <u>recommended</u> . Only one course may be taken in the communication discipline.					
<b>ART</b>					
ART 111 Art Appreciation	3	0	0	0	3
ART 114 Art History Survey I	3	0	0	0	3
ART 115 Art History Survey II	3	0	0	0	3
ART 116 Survey of American Art	3	0	0	0	3
ART 117 Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>					
COM 120 Interpersonal Commun.	3	0	0	0	3
Or					
*COM231 Public Speaking	3	0	0	0	3
<b>ENGLISH</b>					
ENG 131 Introduction to Literature	3	0	0	0	3
ENG 231 American Literature I	3	0	0	0	3
ENG 232 American Literature II	3	0	0	0	3
ENG 241 British Literature I	3	0	0	0	3
ENG 242 British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>					
*FRE 111 Elementary French I	3	0	0	0	3
*FRE 112 Elementary French II	3	0	0	0	3
*GER 111 Elementary German I	3	0	0	0	3
*GER 112 Elementary German II	3	0	0	0	3
*SPA 111 Elementary Spanish I	3	0	0	0	3
*SPA 112 Elementary Spanish II	3	0	0	0	3
SPA 211 Intermediate Spanish I	3	0	0	0	3
SPA 212 Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>					
HUM 110 Technology and Society	3	0	0	0	3
HUM 115 Critical Thinking	3	0	0	0	3
HUM 160 Introduction to Film	2	2	0	0	3
<b>MUSIC</b>					
MUS 110 Music Appreciation	3	0	0	0	3
MUS 112 Introduction to Jazz	3	0	0	0	3
MUS 113 American Music	3	0	0	0	3

**PHILOSOPHY**

PHI	210	History of Philosophy	3	0	0	0	3
PHI	215	Philosophical Issues	3	0	0	0	3
PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Introduction to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Testament	3	0	0	0	3
REL	212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas. **At least one course must be a history course.** Courses marked by an \* are recommended.

**ANTHROPOLOGY**

ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology Lab	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO	151	Survey of Economics	3	0	0	0	3
ECO	251	Prin. of Microeconomics	3	0	0	0	3
ECO	252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL	110	Intro. to Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	210	Comparative Government	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

*PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

One of the courses below marked with an \* is recommended:

*SOC	210	Introduction to Sociology	3	0	0	0	3
SOC	213	Sociology of the Family	3	0	0	0	3
*SOC	220	Social Problems	3	0	0	0	3
*SOC	225	Social Diversity	3	0	0	0	3
SOC	230	Race and Ethnic Relations	3	0	0	0	3
SOC	240	Social Psychology	3	0	0	0	3



**GEOGRAPHY**

One of the courses below marked with an \* is recommended:

*GEO 111	World Geography	3	0	0	0	3
*GEO 112	Cultural Geography	3	0	0	0	3
*GEO 130	Cultural Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

*Mathematics (6 SHC):* CIS 110 is recommended.

**ASTRONOMY**

AST 111	Descriptive Astronomy	3	0	0	0	3
AST 111A	Descriptive Astronomy Lab	0	2	0	0	1

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Environmental Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 131	Introduction to Chemistry	3	0	0	0	3
CHM 131A	Intro. to Chemistry Lab	0	3	0	0	1
CHM 132	Organic and Biochemistry	3	3	0	0	4
CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 110	Conceptual Physics	3	0	0	0	3
PHY 110A	Conceptual Physics Lab	0	2	0	0	1
PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS (required)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**Select one of the following:**

*CIS 110	Introduction to Computers	3	0	0	0	3
Or						
CIS 115	Intro. to Prog. & Logic	2	2	0	0	3
Or						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1

Hours from mathematics labs will be applied towards Other Required Hours explained below.

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

The following course is required:

POL 120	American Government	3	0	0	0	3
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17 additional hours of approved college transfer courses are required.

The following courses are recommended:

POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

One of the following is recommended:

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

Total Semester Hours Credit: 64-65

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*



**ASSOCIATE IN ARTS****Pre-Major: Psychology**  
(A1010L)

Title	Class	Lab	Clinical	Work	Credits
General Education Courses (44SHC)*					
<b>ENGLISH COMPOSITION (6 SHC)</b>					
<b>ENG 111 is required.</b> Students will only receive credit for one of the following ENG 112, ENG 113 or ENG 114.					
ENG 111 Expository Writing	3	0	0	0	3
ENG 112 Argument-Based Research	3	0	0	0	3
ENG 113 Literature-Based Research	3	0	0	0	3
ENG 114 Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>					
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b> Only one course may be taken in the communication discipline.					
<b>ART</b>					
ART 111 Art Appreciation	3	0	0	0	3
ART 114 Art History Survey I	3	0	0	0	3
ART 115 Art History Survey II	3	0	0	0	3
ART 116 Survey of American Art	3	0	0	0	3
ART 117 Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>					
COM 120 Interpersonal Commun.	3	0	0	0	3
Or					
COM 231 Public Speaking	3	0	0	0	3
<b>ENGLISH</b>					
ENG 131 Introduction to Literature	3	0	0	0	3
ENG 231 American Literature I	3	0	0	0	3
ENG 232 American Literature II	3	0	0	0	3
ENG 241 British Literature I	3	0	0	0	3
ENG 242 British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>					
FRE 111 Elementary French I	3	0	0	0	3
FRE 112 Elementary French II	3	0	0	0	3
GER 111 Elementary German I	3	0	0	0	3
GER 112 Elementary German II	3	0	0	0	3
SPA 111 Elementary Spanish I	3	0	0	0	3
SPA 112 Elementary Spanish II	3	0	0	0	3
SPA 211 Intermediate Spanish I	3	0	0	0	3
SPA 212 Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>					
HUM 110 Technology and Society	3	0	0	0	3
HUM 115 Critical Thinking	3	0	0	0	3
<b>MUSIC</b>					
MUS 110 Music Appreciation	3	0	0	0	3
MUS 112 Introduction to Jazz	3	0	0	0	3
MUS 113 American Music	3	0	0	0	3
<b>PHILOSOPHY</b>					
PHI 210 History of Philosophy	3	0	0	0	3
PHI 215 Philosophical Issues	3	0	0	0	3
PHI 220 Western Philosophy I	3	0	0	0	3

PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Introduction to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Testament	3	0	0	0	3
REL	212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas. **At least one course must be a history course. PSY 150 is required.**

**ANTHROPOLOGY**

ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology Lab	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO	151	Survey of Economics	3	0	0	0	3
ECO	251	Prin. of Microeconomics	3	0	0	0	3
ECO	252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL	110	Intro Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	210	Comparative Government	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

*PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC	210	Introduction to Sociology	3	0	0	0	3
SOC	213	Sociology of the Family	3	0	0	0	3
SOC	220	Social Problems	3	0	0	0	3
SOC	225	Social Diversity	3	0	0	0	3
SOC	230	Race and Ethnic Relations	3	0	0	0	3
SOC	240	Social Psychology	3	0	0	0	3

**GEOGRAPHY**

GEO	111	World Geography	3	0	0	0	3
GEO	112	Cultural Geography	3	0	0	0	3
GEO	130	Gen. Physical Geography	3	0	0	0	3



**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. **BIO 110 OR 111 is required.** Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

*Mathematics (6 SHC):* Select at least one course from each series.

**ASTRONOMY**

AST	111	Descriptive Astronomy	3	0	0	0	3
AST	111A	Descriptive Astronomy Lab	0	2	0	0	1

**BIOLOGY**

BIO	110	Principles of Biology	3	3	0	0	4
BIO	111	General Biology I	3	3	0	0	4
BIO	112	General Biology II	3	3	0	0	4
BIO	120	Introductory Botany	3	3	0	0	4
BIO	130	Introductory Zoology	3	3	0	0	4
BIO	140	Environmental Biology	3	0	0	0	3
BIO	140A	Environmental Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM	131	Introduction to Chemistry	3	0	0	0	3
CHM	131A	Intro. To Chemistry Lab	0	3	0	0	1
CHM	132	Organic and Biochemistry	3	3	0	0	4
CHM	151	General Chemistry I	3	3	0	0	4
CHM	152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL	111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY	110	Conceptual Physics	3	0	0	0	3
PHY	110A	Conceptual Physics Lab	0	2	0	0	1
PHY	151	College Physics I	3	2	0	0	4
PHY	152	College Physics II	3	2	0	0	4

**MATHEMATICS (required)**

MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1

**Select one of the following:**

CIS	115	Intro to Prog. & Logic	2	2	0	0	3
Or							
MAT	151	Statistics I	3	0	0	0	3
MAT	151A	Statistics Lab	0	2	0	0	1

Hours from mathematics labs will be applied towards Other Required Hours explained below.

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer. Students intending to major in a psychology at a UNC institution are advised to take no more than 6 hours in psychology electives at the community college level.

**Total Semester Hours Credit:** 64-65

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*

# ASSOCIATE IN ARTS

Pre-Major: Social Science Secondary Education  
(A1010M)

Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>					
<b>ENGLISH COMPOSITION (6 SHC)</b>					
<b>ENG 111 is required.</b> Students will only receive credit for one of the following ENG 112, ENG 113 or ENG 114. ENG 112 is <u>recommended</u> .					
ENG 111 Expository Writing	3	0	0	0	3
*ENG 112 Argument-Based Research	3	0	0	0	3
ENG 113 Literature-Based Research	3	0	0	0	3
ENG 114 Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>					
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b> Only one course may be taken in the communication discipline.					
<b>ART</b>					
ART 111 Art Appreciation	3	0	0	0	3
ART 114 Art History Survey I	3	0	0	0	3
ART 115 Art History Survey II	3	0	0	0	3
ART 116 Survey of American Art	3	0	0	0	3
ART 117 Non-Western Art History	3	0	0	0	3
<b>ENGLISH</b>					
ENG 131 Introduction to Literature	3	0	0	0	3
ENG 231 American Literature I	3	0	0	0	3
ENG 232 American Literature II	3	0	0	0	3
ENG 241 British Literature I	3	0	0	0	3
ENG 242 British Literature II	3	0	0	0	3
<b>COMMUNICATION</b>					
COM 120 Interpersonal Commun.	3	0	0	0	3
Or					
COM 231 Public Speaking	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>					
FRE 111 Elementary French I	3	0	0	0	3
FRE 112 Elementary French II	3	0	0	0	3
GER 111 Elementary German I	3	0	0	0	3
GER 112 Elementary German II	3	0	0	0	3
SPA 111 Elementary Spanish I	3	0	0	0	3
SPA 112 Elementary Spanish II	3	0	0	0	3
SPA 211 Intermediate Spanish I	3	0	0	0	3
SPA 212 Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>					
HUM 110 Technology and Society	3	0	0	0	3
HUM 115 Critical Thinking	3	0	0	0	3
HUM 160 Introduction to Film	2	2	0	0	3
<b>MUSIC</b>					
MUS 110 Music Appreciation	3	0	0	0	3
MUS 112 Introduction to Jazz	3	0	0	0	3
MUS 113 American Music	3	0	0	0	3



**PHILOSOPHY**

PHI	210	History of Philosophy	3	0	0	0	3
PHI	215	Philosophical Issues	3	0	0	0	3
PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Introduction to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Testament	3	0	0	0	3
REL	212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

The following courses are required:

**HISTORY**

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3

**POLITICAL SCIENCE**

POL	120	American Government	3	0	0	0	3
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**SOCIOLOGY**

SOC	210	Introduction to Sociology	3	0	0	0	3
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**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

*Mathematics (6 SHC)*

**ASTRONOMY**

AST	111	Descriptive Astronomy	3	0	0	0	3
AST	111A	Descriptive Astronomy Lab	0	2	0	0	1

**BIOLOGY**

BIO	110	Principles of Biology	3	3	0	0	4
BIO	111	General Biology I	3	3	0	0	4
BIO	112	General Biology II	3	3	0	0	4
BIO	120	Introductory Botany	3	3	0	0	4
BIO	130	Introductory Zoology	3	3	0	0	4
BIO	140	Environmental Biology	3	0	0	0	3
BIO	140A	Environmental Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM	131	Introduction to Chemistry	3	0	0	0	3
CHM	131A	Intro. To Chemistry Lab	0	3	0	0	1
CHM	132	Organic and Biochemistry	3	3	0	0	4
CHM	151	General Chemistry I	3	3	0	0	4
CHM	152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL	111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY	110	Conceptual Physics	3	0	0	0	3
PHY	110A	Conceptual Physics Lab	0	2	0	0	1

PHY	151	College Physics I	3	2	0	0	4
PHY	152	College Physics II	3	2	0	0	4

<b>MATHEMATICS (required)</b>							
MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1

<b>Select one of the following:</b>							
CIS	115	Intro to Prog. & Logic	2	2	0	0	3
Or							
MAT	151	Statistics I	3	0	0	0	3
MAT	151A	Statistics Lab	0	2	0	0	1

Hours from mathematics labs will be applied towards Other Required Hours explained below.

**OTHER REQUIRED HOURS (20-21 SHC)\***  
Must include additional general education and professional courses that have been approved for transfer.

<b>The following courses are required (9 SHC):</b>							
GEO	111	World Regional Geo.	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**One of the following is required (3 SHC or 6 SHC):** Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252. **Students must take either ECO 151 or the sequence ECO 251 and 252.**

ECO	151	Survey of Economics	3	0	0	0	3
Or							
ECO	251	Prin. Of Microeconomics	3	0	0	0	3
And							
ECO	252	Prin. Of Macroeconomics	3	0	0	0	3

**5-8 additional hours of approved college transfer courses are required to total 64 SHC of transferable courses.**

**Total Semester Hours Credit: 64-65**

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*



ASSOCIATE IN ARTS

Pre-Major: Sociology  
(A1010N)

COLLEGE TRANSFER DEGREE PROGRAMS

Title	Class	Lab	Clinical	Work	Credits
General Education Courses (44SHC)*					
ENGLISH COMPOSITION (6 SHC)					
ENG 111 is required. Students will only receive credit for one of the following: ENG 112, ENG 113 or ENG 114. ENG 112 is recommended.					
ENG 111 Expository Writing	3	0	0	0	3
*ENG 112 Argument-Based Research	3	0	0	0	3
ENG 113 Literature-Based Research	3	0	0	0	3
ENG 114 Prof. Research & Report	3	0	0	0	3
HUMANITIES/FINE ARTS (12 SHC)					
Select four courses from at least three of the following discipline areas. At least one course must be a literature course. Only one course may be taken in the communication discipline.					
ART					
ART 111 Art Appreciation	3	0	0	0	3
ART 114 Art History Survey I	3	0	0	0	3
ART 115 Art History Survey II	3	0	0	0	3
ART 116 Survey of American Art	3	0	0	0	3
ART 117 Non-Western Art History	3	0	0	0	3
COMMUNICATION					
COM 120 Interpersonal Commun.	3	0	0	0	3
Or					
COM 231 Public Speaking	3	0	0	0	3
ENGLISH					
ENG 131 Introduction to Literature	3	0	0	0	3
ENG 231 American Literature I	3	0	0	0	3
ENG 232 American Literature II	3	0	0	0	3
ENG 241 British Literature I	3	0	0	0	3
ENG 242 British Literature II	3	0	0	0	3
FOREIGN LANGUAGES					
FRE 111 Elementary French I	3	0	0	0	3
FRE 112 Elementary French II	3	0	0	0	3
GER 111 Elementary German I	3	0	0	0	3
GER 112 Elementary German II	3	0	0	0	3
SPA 111 Elementary Spanish I	3	0	0	0	3
SPA 112 Elementary Spanish II	3	0	0	0	3
SPA 211 Intermediate Spanish I	3	0	0	0	3
SPA 212 Intermediate Spanish II	3	0	0	0	3
HUMANITIES					
HUM 110 Technology and Society	3	0	0	0	3
HUM 115 Critical Thinking	3	0	0	0	3
HUM 160 Introduction to Film	2	2	0	0	3
MUSIC					
MUS 110 Music Appreciation	3	0	0	0	3
MUS 112 Introduction to Jazz	3	0	0	0	3
MUS 113 American Music	3	0	0	0	3

**PHILOSOPHY**

PHI	210	History of Philosophy	3	0	0	0	3
PHI	215	Philosophical Issues	3	0	0	0	3
PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Introduction to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro. to Old Testament	3	0	0	0	3
REL	212	Intro. to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas. **At least one course must be a history course. SOC 210 is required. One of the following courses is also required: SOC 213, 220, 225, or 240.**

**ANTHROPOLOGY**

ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology Lab	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO	151	Survey of Economics	3	0	0	0	3
ECO	251	Prin. of Microeconomics	3	0	0	0	3
ECO	252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL	110	Intro. to Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	210	Comparative Government	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC	210	Introduction to Sociology	3	0	0	0	3
SOC	213	Sociology of the Family	3	0	0	0	3
SOC	220	Social Problems	3	0	0	0	3
SOC	225	Social Diversity	3	0	0	0	3
SOC	230	Race and Ethnic Relations	3	0	0	0	3
SOC	240	Social Psychology	3	0	0	0	3



**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

*Mathematics (6 SHC):* MAT 151 and 151A are recommended.

**ASTRONOMY**

AST 111	Descriptive Astronomy	3	0	0	0	3
AST 111A	Descriptive Astronomy Lab	0	2	0	0	1

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Environmental Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 131	Introduction to Chemistry	3	0	0	0	3
CHM 131A	Intro. to Chemistry Lab	0	3	0	0	1
CHM 132	Organic and Biochemistry	3	3	0	0	4
CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 110	Conceptual Physics	3	0	0	0	3
PHY 110A	Conceptual Physics Lab	0	2	0	0	1
PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS (required)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**Select one of the following:**

CIS 115	Intro to Prog. & Logic	2	2	0	0	3
Or						
*MAT151	Statistics I	3	0	0	0	3
*MAT151A	Statistics Lab	0	2	0	0	1

Hours from mathematics labs will be applied towards Other Required Hours explained below.

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

**Total Semester Hours Credit:****64-65**

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*

**ASSOCIATE IN ARTS****Pre-Major: Elementary Education  
(A1010R)**

Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>					
<b>ENGLISH COMPOSITION (6 SHC)</b>					
<b>ENG 111 is required.</b> Students will only receive credit for either ENG 112 or 113.					
ENG 111 Expository Writing	3	0	0	0	3
ENG 112 Argument-Based Research	3	0	0	0	3
ENG 113 Literature-Based Research	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>					
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course. COM 231 is required. One of the following is required ART 111, ART 114, ART 115, or MUS 110. One additional course is required.</b>					
<b>ART</b>					
ART 111 Art Appreciation	3	0	0	0	3
ART 114 Art History Survey I	3	0	0	0	3
ART 115 Art History Survey II	3	0	0	0	3
ART 116 Survey of American Art	3	0	0	0	3
ART 117 Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>					
COM 231 Public Speaking	3	0	0	0	3
<b>ENGLISH</b>					
ENG 131 Introduction to Literature	3	0	0	0	3
ENG 231 American Literature I	3	0	0	0	3
ENG 232 American Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>					
FRE 111 Elementary French I	3	0	0	0	3
FRE 112 Elementary French II	3	0	0	0	3
GER 111 Elementary German I	3	0	0	0	3
GER 112 Elementary German II	3	0	0	0	3
SPA 111 Elementary Spanish I	3	0	0	0	3
SPA 112 Elementary Spanish II	3	0	0	0	3
SPA 211 Intermediate Spanish I	3	0	0	0	3
SPA 212 Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>					
HUM 110 Technology and Society	3	0	0	0	3
HUM 115 Critical Thinking	3	0	0	0	3
HUM 160 Intro to Film	3	0	0	0	3
<b>MUSIC</b>					
MUS 110 Music Appreciation	3	0	0	0	3
MUS 112 Introduction to Jazz	3	0	0	0	3
MUS 113 American Music	3	0	0	0	3
<b>PHILOSOPHY</b>					
PHI 210 History of Philosophy	3	0	0	0	3
PHI 215 Philosophical Issues	3	0	0	0	3
PHI 220 Western Philosophy I	3	0	0	0	3
PHI 221 Western Philosophy II	3	0	0	0	3
PHI 230 Introduction to Logic	3	0	0	0	3
PHI 240 Introduction to Ethics	3	0	0	0	3



RELIGION

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro. to Old Testament	3	0	0	0	3
REL 212	Intro. to New Testament	3	0	0	0	3

SOCIAL/BEHAVIORAL SCIENCES (12 SHC)

Select four courses from at least three of the following discipline areas. **At least one course must be a history course. PSY 150 is required. SOC 210 or SOC 225 is required. One additional course is required.**

ANTHROPOLOGY

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 230	Physical Anthropology	3	0	0	0	3
ANT 230A	Physical Anthropology Lab	0	2	0	0	1
ANT 240	Archaeology	3	0	0	0	3

ECONOMICS

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

HISTORY

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3

POLITICAL SCIENCE

POL 110	Intro. to Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

PSYCHOLOGY

**PSY 150 is required.**

PSY 150	General Psychology	3	0	0	0	3
PSY 237	Social Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Developmental Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

SOCIOLOGY

**SOC 210 or 225 is required.**

SOC 210	Introduction to Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 230	Race and Ethnic Relations	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

GEOGRAPHY

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

*Mathematics (6 SHC):* **CIS 110, MAT 161 and MAT 161A are required.**

**Natural Sciences**

**Choose either BIO 110 or BIO 111.**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4

**Choose either CHM 131 and CHM 131A or PHY 110 and PHY 110A.**

CHM 131	Introduction to Chemistry	3	0	0	0	3
CHM 131A	Intro. to Chemistry Lab	0	3	0	0	1
PHY 110	Conceptual Physics	3	0	0	0	3
PHY 110A	Conceptual Physics Lab	0	2	0	0	1

**MATHEMATICS (required)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1
CIS 110	Introduction to Computers	2	2	0	0	3

One hour from Math lab will be applied to Other Required Hours explained below.

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer. At certain institutions EDU 216 may fulfill major requirements; at a majority of institutions it will transfer only as a free elective. Students should check with the university for the local transfer policy regarding EDU 216. Elementary Education students attending UNCC should consider taking MUS 280.

**Students should take courses from one of the following areas:**

**I. Diversity Studies**

Select 18 SHC from a minimum of two and a maximum of three different prefixes.

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
COM 120	Interpersonal Commun.	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
REL 110	World Religion	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3

**II. The Arts**

Select 18 SHC.

ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
ART 260	Photography Appreciation	3	0	0	0	3
MUS 110	Music Appreciation	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3
MUS 280	Music for the Elem. Clssrm	3	0	0	0	3

No more than 6 SHC may be selected from the following courses:

ART 121	Design I	1	4	0	0	3
ART 122	Design II	1	4	0	0	3
ART 131	Drawing I	0	6	0	0	3



# COLLEGE TRANSFER DEGREE PROGRAMS

ART	132	Drawing II	0	6	0	0	3
ART	171	Computer Art I	1	4	0	0	3
ART	231	Printmaking I	0	6	0	0	3
ART	232	Printmaking II	0	6	0	0	3
ART	240	Painting I	0	6	0	0	3
ART	241	Painting II	0	6	0	0	3
ART	261	Photography I	0	6	0	0	3
ART	262	Photography II	0	6	0	0	3
ART	271	Computer Art II	0	6	0	0	3
ART	281	Sculpture I	0	6	0	0	3
ART	282	Sculpture II	0	6	0	0	3
ART	283	Ceramics I	0	6	0	0	3
ART	284	Ceramics II	0	6	0	0	3

## III. Math, Science and Technology

Select 18 SHC from a minimum of two and a maximum of three different prefixes.

CIS	115	Intro to Prog. & Logic	2	2	0	0	3
MAT	140	Survey of Mathematics					
MAT	151	Statistics I	3	0	0	0	3
MAT	151A	Statistics Lab	0	2	0	0	1
MAT	155	Statistical Analysis	3	0	0	0	3
MAT	155A	Statistical Analysis Lab	0	2	0	0	1
MAT	175	Precalculus	4	0	0	0	4
MAT	252	Statistics II	3	0	0	0	3
MAT	252A	Statistics II Lab	0	2	0	0	1
MAT	263	Brief Calculus	3	0	0	0	3
MAT	263A	Brief Calculus Lab	0	2	0	0	1
MAT	271	Calculus I	3	2	0	0	4
MAT	272	Calculus II	3	2	0	0	4
MAT	273	Calculus III	3	2	0	0	4
MAT	280	Linear Algebra	3	0	0	0	3
MAT	285	Differential Equations	3	0	0	0	3
AST	111	Descriptive Astronomy	3	0	0	0	3
AST	111A	Descriptive Astronomy Lab	0	2	0	0	1
BIO	120	Introductory Botany	3	3	0	0	4
BIO	130	Introductory Zoology	3	3	0	0	4
BIO	140	Environmental Biology	3	0	0	0	3
BIO	140A	Environmental Biology Lab	0	3	0	0	1
BIO	155	Nutrition	3	0	0	0	3
BIO	163	Basic Anatomy & Phys.	4	2	0	0	5
BIO	168	Anatomy & Physiology I	3	3	0	0	4
BIO	169	Anatomy & Physiology II	3	3	0	0	4
BIO	250	Genetics	3	3	0	0	4
BIO	271	Pathophysiology	3	0	0	0	3
BIO	275	Microbiology	3	3	0	0	4
BIO	280	Biotechnology	2	3	0	0	3
CHM	131	Introduction to Chemistry	3	0	0	0	3
CHM	131A	Intro. to Chemistry Lab	0	3	0	0	1
CHM	132	Organic and Biochemistry	3	3	0	0	4
GEL	111	Introductory Geology	3	2	0	0	4
PHY	110	Conceptual Physics	3	0	0	0	3
PHY	110A	Conceptual Physics Lab	0	2	0	0	1
PHY	151	College Physics I	3	2	0	0	4
PHY	152	College Physics II	3	2	0	0	4

**Total Semester Hours Credit:**

**64-65**

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*

**Total Semester Hours Credit (SHC) in Program: 64-65**

ASSOCIATE IN ARTS

Pre-Major: Middle Grades and Special Education  
(A1010S)

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
<b>ENG 111 is required.</b> Students will only receive credit for either ENG 112 or 113.						
ENG	111	Expository Writing	3	0	0	3
ENG	112	Argument-Based Research	3	0	0	3
ENG	113	Literature-Based Research	3	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course. COM 231 is required. One of the following is required ART 111, ART 114, ART 115, or MUS 110. One additional course is required.</b>						
<b>ART</b>						
ART	111	Art Appreciation	3	0	0	3
ART	114	Art History Survey I	3	0	0	3
ART	115	Art History Survey II	3	0	0	3
ART	116	Survey of American Art	3	0	0	3
ART	117	Non-Western Art History	3	0	0	3
<b>COMMUNICATION</b>						
COM	231	Public Speaking	3	0	0	3
<b>ENGLISH</b>						
ENG	131	Introduction to Literature	3	0	0	3
ENG	231	American Literature I	3	0	0	3
ENG	232	American Literature II	3	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE	111	Elementary French I	3	0	0	3
FRE	112	Elementary French II	3	0	0	3
GER	111	Elementary German I	3	0	0	3
GER	112	Elementary German II	3	0	0	3
SPA	111	Elementary Spanish I	3	0	0	3
SPA	112	Elementary Spanish II	3	0	0	3
SPA	211	Intermediate Spanish I	3	0	0	3
SPA	212	Intermediate Spanish II	3	0	0	3
<b>HUMANITIES</b>						
HUM	110	Technology and Society	3	0	0	3
HUM	115	Critical Thinking	3	0	0	3
HUM	160	Intro to Film	3	0	0	3
<b>MUSIC</b>						
MUS	110	Music Appreciation	3	0	0	3
MUS	112	Introduction to Jazz	3	0	0	3
MUS	113	American Music	3	0	0	3
<b>PHILOSOPHY</b>						
PHI	210	History of Philosophy	3	0	0	3
PHI	215	Philosophical Issues	3	0	0	3
PHI	220	Western Philosophy I	3	0	0	3
PHI	221	Western Philosophy II	3	0	0	3
PHI	230	Introduction to Logic	3	0	0	3
PHI	240	Introduction to Ethics	3	0	0	3



**RELIGION**

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro. to Old Testament	3	0	0	0	3
REL 212	Intro. to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

At least one course must be a history course. PSY 150 is required. SOC 210 or SOC 225 is required. One additional course is required.

**ANTHROPOLOGY**

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 230	Physical Anthropology	3	0	0	0	3
ANT 230A	Physical Anthropology Lab	0	2	0	0	1
ANT 240	Archaeology	3	0	0	0	3

**ECONOMICS**

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3

**POLITICAL SCIENCE**

POL 110	Intro. to Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY 150 is required.

PSY 150	General Psychology	3	0	0	0	3
PSY 237	Social Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Developmental Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC 210 or 225 is required.

SOC 210	Introduction to Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 230	Race and Ethnic Relations	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

*Mathematics (6 SHC):* CIS 110, MAT 161 and MAT 161A are required.

**Natural Sciences**

Choose either BIO 110 or BIO 111.

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4

Choose either CHM 131 and CHM 131A or PHY 110 and PHY 110A.

CHM 131	Introduction to Chemistry	3	0	0	0	3
CHM 131A	Intro. to Chemistry Lab	0	3	0	0	1
PHY 110	Conceptual Physics	3	0	0	0	3
PHY 110A	Conceptual Physics Lab	0	2	0	0	1

**MATHEMATICS (required)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1
CIS 110	Introduction to Computers	2	2	0	0	3

One hour from Math lab will be applied to Other Required Hours explained below.

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer. At certain institutions EDU 216 may fulfill major requirements; at a majority of institutions it will transfer only as a free elective. Students should check with the university for the local transfer policy regarding EDU 216. It is recommended that within the 20 semester hours of "Other Required Hours," pre-education students in Middle Grades Education and Special Education select courses that will help meet the mandated academic (second major) concentration. In order to be consistent with NC licensure areas, Middle Grades education students should select courses from up to two (2) of the following areas.

**Recommended Courses for Typical Academic Concentrations:****English**

ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
ENG 273	African-American Literature	3	0	0	0	3
ENG 274	Literature by Women	3	0	0	0	3

**Math**

MAT 140	Survey of Mathematics					
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1
or						
MAT 155	Statistical Analysis	3	0	0	0	3
MAT 155A	Statistical Analysis Lab	0	2	0	0	1
MAT 175	Precalculus	4	0	0	0	4
MAT 271	Calculus I	3	2	0	0	4
MAT 272	Calculus II	3	2	0	0	4

**Psychology**

PSY 150	General Psychology	3	0	0	0	3
PSY 237	Social Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Developmental Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3



# COLLEGE TRANSFER DEGREE PROGRAMS

## Science

AST	111	Descriptive Astronomy	3	0	0	0	3
AST	111A	Descriptive Astronomy Lab	0	2	0	0	1
BIO	120	Introductory Botany	3	3	0	0	4
BIO	130	Introductory Zoology	3	3	0	0	4
BIO	140	Environmental Biology	3	0	0	0	3
BIO	140A	Environmental Biology Lab	0	3	0	0	1
CHM	131	Introduction to Chemistry	3	0	0	0	3
CHM	131A	Intro. to Chemistry Lab	0	3	0	0	1
or							
CHM	151	General Chemistry I	3	3	0	0	4
CHM	132	Organic and Biochemistry	3	3	0	0	4
or							
CHM	152	General Chemistry II	3	3	0	0	4
GEL	111	Introductory Geology	3	2	0	0	4
PHY	110	Conceptual Physics	3	0	0	0	3
PHY	110A	Conceptual Physics Lab	0	2	0	0	1

## Social Science

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3
HIS	236	North Carolina History	3	0	0	0	3
GEO	111	World Geography	3	0	0	0	3
POL	120	American Government	3	0	0	0	3

**Total Semester Hours Credit:** 64-65

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*

ASSOCIATE IN SCIENCE  
(A10400)

The Associate in Science degree shall be granted for planned programs of study consisting of a minimum of 64 and a maximum of 65 semester hours of approved college transfer courses. Within the degree program, the college shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers.

Title		Class	Lab	Clinical	Work	Credits
General Education Courses (44 SHC)*						
ENGLISH COMPOSITION (6 SHC)						
ENG 111 is required. Students will only receive credit for one of the following: ENG 112, ENG 113 or ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Argument-Based Research	3	0	0	0	3
ENG 113	Literature-Based Res.	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3

HUMANITIES/FINE ARTS (9 SHC)  
Select three courses from at least three of the following discipline areas. **One course must be a literature course.** Only one course may be taken from the communication discipline.

ART						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American History	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3

COMMUNICATION						
COM 120	Interpersonal Commun.	3	0	0	0	3
Or						
COM 231	Public Speaking	3	0	0	0	3

ENGLISH						
ENG 131	Introduction to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3

FOREIGN LANGUAGES						
FRE 111	Elementary French I	3	0	0	0	3
FRE 112	Elementary French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elementary Spanish I	3	0	0	0	3
SPA 112	Elementary Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3

HUMANITIES						
HUM 110	Technology and Society	3	0	0	0	3
HUM 115	Critical Thinking	3	0	0	0	3
HUM 160	Introduction to Film	2	2	0	0	3



# COLLEGE TRANSFER DEGREE PROGRAMS

## MUSIC

MUS	110	Music Appreciation	3	0	0	0	3
MUS	112	Introduction to Jazz	3	0	0	0	3
MUS	113	American Music	3	0	0	0	3

## PHILOSOPHY

PHI	210	History of Philosophy	3	0	0	0	3
PHI	215	Philosophical Issues	3	0	0	0	3
PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Introduction to Ethics	3	0	0	0	3

## RELIGION

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Testament	3	0	0	0	3
REL	212	Intro to New Testament	3	0	0	0	3

## SOCIAL/BEHAVIORAL SCIENCES (9 SHC)

Select three courses from at least three of the following discipline areas.

**One course must be a history course.**

### ANTHROPOLOGY

ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology Lab	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3

## ECONOMICS

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO	151	Survey of Economics	3	0	0	0	3
ECO	251	Prin. of Microeconomics	3	0	0	0	3
ECO	252	Prin. of Macroeconomics	3	0	0	0	3

## HISTORY

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

## POLITICAL SCIENCE

POL	110	Intro Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	210	Comparative Govt.	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3

## PSYCHOLOGY

PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC 210	Introduction to Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 230	Race & Ethnic Relations	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	General Physical Geogr.	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (20 SHC)**

*Natural Sciences (8 SHC):* A two-course sequence in general biology, general chemistry, or general physics is required. BIO 110 may be used as an elective if the sequence chosen is not Biology.

*Mathematics (6 SHC)*

**BIOLOGY**

BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**PHYSICS**

If the physics option is chosen students must take one of the following sequences:

PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

Or

PHY 251	General Physics I	3	3	0	0	4
PHY 252	General Physics II	3	3	0	0	4

**MATHEMATICS**

**The following courses are required:**

MAT 175	Precalculus	4	0	0	0	4
MAT 175A	Precalculus Lab	0	2	0	0	1
MAT 271	Calculus I	3	2	0	0	4

**One hour of the above credits will be applied to the Other Required Hours explained below.**

An additional 4 SHC must be selected from the courses shown above or from the following courses:

AST 111	Descriptive Astronomy	3	0	0	0	3
AST 111A	Descriptive Astronomy Lab	0	2	0	0	1
BIO 110	Principles of Biology	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Environmental Biology Lab	0	3	0	0	1
CHM 131	Introduction to Chemistry	3	0	0	0	3
CHM 131A	Intro. to Chemistry Lab	0	3	0	0	1
CHM 132	Organic and Biochemistry	3	3	0	0	4
CIS 110	Introduction to Computers	2	2	0	0	3
CIS 115	Introduction to Prog. & Logic	2	2	0	0	3
GEL 111	Introductory Geology	3	2	0	0	4
MAT 151	Statistics I	3	0	0	0	3
MAT 263	<b>Brief Calculus</b>	3	0	0	0	3



MAT	272	Calculus II	3	2	0	0	4
MAT	273	Calculus III	3	2	0	0	4
PHY	110	Conceptual Physics	3	0	0	0	3
PHY	110A	Conceptual Physics Lab	0	2	0	0	1

OTHER REQUIRED HOURS (18-20 SHC)\*  
**Must include a minimum of 14 SHC in mathematics and/or science and professional courses that have been approved for transfer.**

Students will not receive credit for both BIO 110 and BIO 111. Students will receive credit for both CHM 131 and CHM 151. Students will not receive credit for only one of PHY 110, PHY 151, and 251.

**Total Semester Hours Credit:** 64-65

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*

**ASSOCIATE IN SCIENCE**

Pre-Major: Engineering  
(A1040D)

Students entering the Pre-Engineering Associate in Science Degree Program must demonstrate competency in or complete the prerequisites required for MAT 271, Calculus I.

Title		Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
<b>ENG 111 is required.</b> Students will not receive credit for both ENG 112 and ENG 113.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Argument-Based Research	3	0	0	0	3
ENG 113	Literature-Based Research	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (9 SHC)</b>						
Select three courses from at least three of the following discipline areas. <b>At least one course must be a literature course.*</b>						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Introduction to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elementary French I	3	0	0	0	3
FRE 112	Elementary French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elementary Spanish I	3	0	0	0	3
SPA 112	Elementary Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
HUM 150	American Women's Studies	3	0	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Introduction to Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3
<b>PHILOSOPHY</b>						
PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Introduction to Ethics	3	0	0	0	3
<b>RELIGION</b>						
REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3



REL 212	Intro to New Testament	3	0	0	0	3
REL 221	Religion in America	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (9 SHC)**

Select three courses from at least three of the following discipline areas. **One history course is required. Either ECO 251 or ECO 252 is required.\***

**ANTHROPOLOGY**

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3

**ECONOMICS**

One of the following courses is required:

ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	<b>Prin. of Macroeconomics</b>	3	0	0	0	3

**HISTORY**

HIS 121	Western Civilization I	3	0	0	0	3
HIS 122	Western Civilization II	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL 120	American Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY 150	General Psychology	3	0	0	0	3
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**SOCIOLOGY**

SOC 210	Introduction to Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 215	Group Processes	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3
SOC 242	Sociology of Deviance	3	0	0	0	3

**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (20 SHC)**

*Natural Sciences (12 SHC): CHM 151, PHY 251 and PHY 252 are required.*

*Mathematics (8 SHC): MAT 271 and MAT 272 are required.*

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
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**PHYSICS**

PHY 251	General Physics I	3	2	0	0	4
PHY 252	General Physics II	3	2	0	0	4

**MATHEMATICS**

MAT 271	Calculus I	3	2	0	0	4
MAT 272	Calculus II	3	2	0	0	4

**OTHER REQUIRED HOURS (20 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

COLLEGE TRANSFER DEGREE PROGRAMS

The following courses are required:

MAT 273	Calculus III	3	2	0	0	4
MAT 285	Differential Equations	3	0	0	0	3

The following is required:

CSC 134	C++ Programming	2	3	0	0	3
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One of the following courses is required:

CHM 152	General Chemistry II	3	3	0	0	4
DFT 170	Engineering Graphics	2	2	0	0	3

7 SHC of additional approved college transfer courses are required. Students must have a minimum of 64 hours total.

Total Semester Hours Credit: 64-65

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*



ASSOCIATE IN SCIENCE

Pre-Major: Mathematics  
(A1040E)

COLLEGE TRANSFER DEGREE PROGRAMS

The Associate in Science degree shall be granted for planned programs of study consisting of a minimum of 64 and a maximum of 65 semester hours of approved college transfer courses. Within the degree program, the college shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers.

Title		Class	Lab	Clinical	Work	Credits
General Education Courses (44 SHC)*						
ENGLISH COMPOSITION (6 SHC)						
ENG 111 is required. Students will only receive credit for one of the following: ENG 112, ENG 113 or ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Argument-Based Research	3	0	0	0	3
ENG 113	Literature-Based Res.	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3

HUMANITIES/FINE ARTS (12 SHC)

Select four courses from at least three of the following discipline areas. At least one course must be a literature course. Only one course may be taken from the communication discipline.

ART						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American History	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3

COMMUNICATION

COM 120	Interpersonal Commun.	3	0	0	0	3
Or						
COM 231	Public Speaking	3	0	0	0	3

ENGLISH

ENG 131	Introduction to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3

FOREIGN LANGUAGES

FRE 111	Elementary French I	3	0	0	0	3
FRE 112	Elementary French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elementary Spanish I	3	0	0	0	3
SPA 112	Elementary Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3

HUMANITIES

HUM 110	Technology and Society	3	0	0	0	3
HUM 115	Critical Thinking	3	0	0	0	3
HUM 160	Introduction to Film	2	2	0	0	3

**MUSIC**

MUS	110	Music Appreciation	3	0	0	0	3
MUS	112	Introduction to Jazz	3	0	0	0	3
MUS	113	American Music	3	0	0	0	3

**PHILOSOPHY**

PHI	210	History of Philosophy	3	0	0	0	3
PHI	215	Philosophical Issues	3	0	0	0	3
PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Introduction to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro. to Old Testament	3	0	0	0	3
REL	212	Intro. to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas.

**At least one course must be a history course.**

**ANTHROPOLOGY**

ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology Lab	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO	151	Survey of Economics	3	0	0	0	3
ECO	251	Prin. of Microeconomics	3	0	0	0	3
ECO	252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL	110	Intro. to Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	210	Comparative Government	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3



**SOCIOLOGY**

SOC 210	Introduction to Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 230	Race & Ethnic Relations	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	General Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (20 SHC)**

The following courses are required:

**PHYSICS**

PHY 251	General Physics I	3	3	0	0	4
PHY 252	General Physics II	3	3	0	0	4

**MATHEMATICS**

The following courses are required:

MAT 175	Precalculus	4	0	0	0	4
MAT 175A	Precalculus Lab	0	2	0	0	1
MAT 271	Calculus I	3	2	0	0	4
MAT 272	Calculus II	3	2	0	0	4

**OTHER REQUIRED HOURS (14-15 SHC)**

The following course is required (4 SHC):

MAT 273	Calculus III	3	2	0	0	4
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One of the following courses is required (3 SHC):

MAT 280	Linear Algebra	3	0	0	0	3
MAT 285	Differential equations	3	0	0	0	3

One of the following courses is required (3 SHC):

CSC 134	C++ Programming	2	3	0	0	3
CSC 136	FORTRAN Programming	2	3	0	0	3
CSC 148	JAVA Programming	2	3	0	0	3

4 additional hours of approved college transfer courses are required. The lab hours from MAT 175A will count towards the 4 hours.

Total Semester Hours Credit:

64-65

*\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*

# ASSOCIATE IN SCIENCE

Pre-Major: Mathematics Education  
(A1040F)

The Associate in Science degree shall be granted for planned programs of study consisting of a minimum of 64 and a maximum of 65 semester hours of approved college transfer courses. Within the degree program, the college shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers.

Title	Class	Lab	Clinical	Work	Credits
General Education Courses (44 SHC)*					
<b>ENGLISH COMPOSITION (6 SHC)</b>					
<b>ENG 111 is required.</b> Students will only receive credit for one of the following: ENG 112, ENG 113 or ENG 114.					
ENG 111 Expository Writing	3	0	0	0	3
ENG 112 Argument-Based Research	3	0	0	0	3
ENG 113 Literature-Based Res.	3	0	0	0	3
ENG 114 Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>					
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b> Only one course may be taken from the communication discipline.					
<b>ART</b>					
ART 111 Art Appreciation	3	0	0	0	3
ART 114 Art History Survey I	3	0	0	0	3
ART 115 Art History Survey II	3	0	0	0	3
ART 116 Survey of American History	3	0	0	0	3
ART 117 Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>					
COM 120 Interpersonal Commun.	3	0	0	0	3
Or					
COM 231 Public Speaking	3	0	0	0	3
<b>ENGLISH</b>					
ENG 131 Introduction to Literature	3	0	0	0	3
ENG 231 American Literature I	3	0	0	0	3
ENG 232 American Literature II	3	0	0	0	3
ENG 241 British Literature I	3	0	0	0	3
ENG 242 British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>					
FRE 111 Elementary French I	3	0	0	0	3
FRE 112 Elementary French II	3	0	0	0	3
GER 111 Elementary German I	3	0	0	0	3
GER 112 Elementary German II	3	0	0	0	3
SPA 111 Elementary Spanish I	3	0	0	0	3
SPA 112 Elementary Spanish II	3	0	0	0	3
SPA 211 Intermediate Spanish I	3	0	0	0	3
SPA 212 Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>					
HUM 110 Technology and Society	3	0	0	0	3
HUM 115 Critical Thinking	3	0	0	0	3
HUM 160 Introduction to Film	2	2	0	0	3



**MUSIC**

MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Introduction to Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3

**PHILOSOPHY**

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 230	Introduction to Logic	3	0	0	0	3
PHI 240	Introduction to Ethics	3	0	0	0	3

**RELIGION**

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro. to Old Testament	3	0	0	0	3
REL 212	Intro. to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

**PSY 150 and PSY 241 are required. At least one course must be a history course.**

Select an additional course from one of the following disciplines.

**ANTHROPOLOGY**

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 230	Physical Anthropology	3	0	0	0	3
ANT 230A	Phys. Anthropology Lab	0	2	0	0	1
ANT 240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

**The following courses are required:**

PSY 150	General Psychology	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3

SOC	220	Social Problems	3	0	0	0	3
SOC	225	Social Diversity	3	0	0	0	3
SOC	230	Race & Ethnic Relations	3	0	0	0	3
SOC	240	Social Psychology	3	0	0	0	3

GEOGRAPHY

GEO	111	World Geography	3	0	0	0	3
GEO	112	Cultural Geography	3	0	0	0	3
GEO	130	Gen. Physical Geography	3	0	0	0	3

NATURAL SCIENCES/MATHEMATICS (20 SHC)

PHYSICS

The following physics sequence is required:

PHY	251	General Physics I	3	3	0	0	4
PHY	252	General Physics II	3	3	0	0	4

MATHEMATICS

The following mathematics courses are required:

MAT	175	Precalculus	4	0	0	0	4
MAT	175A	Precalculus Lab	0	2	0	0	1
MAT	271	Calculus I	3	2	0	0	4
MAT	272	Calculus II	3	2	0	0	4

OTHER REQUIRED HOURS (14-15 SHC)\*

A minimum of 14 SHC of college transfer courses in general education, pre-major or elective courses are required.

The following courses are required (8 SHC):

EDU	216	Foundations of Education	3	2	0	0	4
MAT	273	Calculus III	3	2	0	0	4

One of the following courses is required (3 SHC):

MAT	280	Linear Algebra	3	0	0	0	3
MAT	285	Differential equations	3	0	0	0	3

One of the following courses is required (3 SHC):

CSC	134	C++ Programming	2	3	0	0	3
CSC	136	FORTTRAN Programming	2	3	0	0	3
CSC	148	JAVA Programming	2	3	0	0	3

Total Semester Hours Credit: 64-65

*\*Students must meet the receiving university’s foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*



ASSOCIATE IN FINE ARTS

(A10200)

COLLEGE TRANSFER DEGREE PROGRAMS

Title		Class	Lab	Clinical	Work	Credits
<b>General Education Courses (28 SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
<b>ENG 111 is required.</b> Students will not receive credit for both ENG 112 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Argument-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (6 SHC)**</b>						
Select two courses from at least two of the following discipline areas. <b>At least one course must be a literature course.</b>						
<b>ART</b>						
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Introduction to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elementary French I	3	0	0	0	3
FRE 112	Elementary French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elementary Spanish I	3	0	0	0	3
SPA 112	Elementary Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Introduction to Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
HUM 115	Critical Thinking	3	0	0	0	3
HUM 160	Introduction to Film	2	2	0	0	3
<b>PHILOSOPHY</b>						
PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 230	Introduction to Logic	3	0	0	0	3
PHI 240	Introduction to Ethics	3	0	0	0	3
<b>RELIGION</b>						
REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3

REL 112	Western Religion	3	0	0	0	3
REL 211	Intro. to Old Testament	3	0	0	0	3
REL 212	Intro. to New Testament	3	0	0	0	3
REL 221	Religion in America	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (9 SHC)**

Select three courses from at least three of the following discipline areas. **At least one course must be a history course.**

**ANTHROPOLOGY**

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 230	Physical Anthropology	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL 110	Intro. to Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY 150	General Psychology	3	0	0	0	3
PSY 237	Social Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Developmental Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC 210	Introduction to Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 230	Race and Ethnic Relations	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3



**NATURAL SCIENCES/MATHEMATICS (7 SHC)**

*Natural Sciences (4 SHC):* Select one course, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111. Students will not receive credit for both CHM 131 and CHM 151.

*Mathematics (3 SHC):*

**ASTRONOMY**

AST 111	Descriptive Astronomy	3	0	0	0	3
AST 111A	Descriptive Astronomy Lab	0	2	0	0	1

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Environmental Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 131	Introduction to Chemistry	3	0	0	0	3
CHM 131A	Intro. To Chemistry Lab	0	3	0	0	1
CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 110	Conceptual Physics	3	0	0	0	3
PHY 110A	Conceptual Physics Lab	0	2	0	0	1
PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**OTHER REQUIRED HOURS (36-37SHC)\***

ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 121	Design I	1	4	0	0	3
ART 122	Art Design II	1	4	0	0	3
ART 131	Drawing I	0	6	0	0	3

**ART ELECTIVES**

Select at least four of the following courses:

ART 171	Computer Art I	1	4	0	0	3
ART 231	Printmaking I	0	6	0	0	3
ART 240	Painting I	0	6	0	0	3
ART 247	Jewelry I	0	6	0	0	3
ART 261	Photography I	1	4	0	0	3
ART 281	Sculpture I	0	6	0	0	3
ART 283	Ceramics I	0	6	0	0	3

**Choose 10 SHC Art Hours from other art courses not yet taken.**

ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
ART 132	Drawing II	0	6	0	0	3

# COLLEGE TRANSFER DEGREE PROGRAMS

ART 135	Figure Drawing I	0	6	0	0	3
ART 212	Gallery Assistantship I	0	2	0	0	1
ART 213	Gallery Assistantship II	0	2	0	0	1
ART 214	Portfolio and Resume	0	2	0	0	1
ART 232	Printmaking II	0	6	0	0	3
ART 241	Painting II	0	6	0	0	3
ART 244	Watercolor	0	6	0	0	3
ART 248	Jewelry II	0	6	0	0	3
ART 262	Photography II	1	4	0	0	3
ART 271	Computer Art II	0	6	0	0	3
ART 275	Intro. to Commercial Art	0	6	0	0	3
ART 282	Sculpture II	0	6	0	0	3
ART 284	Ceramics II	0	6	0	0	3
ART 285	Ceramics III	0	6	0	0	3
ART 286	Ceramics IV	0	6	0	0	3
ART 288	Studio	0	6	0	0	3

Total Semester Hours Credit:

65



**ASSOCIATE IN GENERAL EDUCATION**

(A10300)

The Associate in General Education degree shall be granted for planned programs of study consisting of a minimum of 64 and a maximum of 65 semester hours of approved courses. Within the degree program, the college shall include opportunities for the achievement of competence in reading, writing, oral communications, fundamental mathematical skills, and the basic use of computers.

Title		Class	Lab	Clinical	Work	Credits
<b>General Education Courses (15SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
<b>ENG 111 is required.</b> Students will only receive credit for one of the following: ENG 112, ENG 113 or ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Argument-Based Research	3	0	0	0	3
ENG 113	Literature-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (3 SHC)</b>						
Select one course from the following discipline areas.						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 120	Interpersonal Commun.	3	0	0	0	3
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Introduction to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elementary French I	3	0	0	0	3
FRE 112	Elementary French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elementary Spanish I	3	0	0	0	3
SPA 112	Elementary Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
HUM 115	Critical Thinking	3	0	0	0	3
HUM 160	Introduction to Film	2	2	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Introduction to Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3

**PHILOSOPHY**

PHI	210	History of Philosophy	3	0	0	0	3
PHI	215	Philosophical Issues	3	0	0	0	3
PHI	220	Western Philosophy I	3	0	0	0	3
PHI	221	Western Philosophy II	3	0	0	0	3
PHI	230	Introduction to Logic	3	0	0	0	3
PHI	240	Introduction to Ethics	3	0	0	0	3

**RELIGION**

REL	110	World Religion	3	0	0	0	3
REL	111	Eastern Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Testament	3	0	0	0	3
REL	212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (3 SHC)**

Select one courses from the following discipline areas.

**ANTHROPOLOGY**

ANT	210	General Anthropology	3	0	0	0	3
ANT	220	Cultural Anthropology	3	0	0	0	3
ANT	221	Comparative Cultures	3	0	0	0	3
ANT	230	Physical Anthropology	3	0	0	0	3
ANT	230A	Physical Anthropology	0	2	0	0	1
ANT	240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO	151	Survey of Economics	3	0	0	0	3
ECO	251	Prin. of Microeconomics	3	0	0	0	3
ECO	252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS	111	World Civilizations I	3	0	0	0	3
HIS	112	World Civilizations II	3	0	0	0	3
HIS	114	Comparative World History	3	0	0	0	3
HIS	116	Current World Problems	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
HIS	132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL	110	Intro Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	210	Comparative Government	3	0	0	0	3
POL	220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY	150	General Psychology	3	0	0	0	3
PSY	237	Social Psychology	3	0	0	0	3
PSY	239	Psychology of Personality	3	0	0	0	3
PSY	241	Developmental Psychology	3	0	0	0	3
PSY	281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC	210	Introduction to Sociology	3	0	0	0	3
SOC	213	Sociology of the Family	3	0	0	0	3
SOC	220	Social Problems	3	0	0	0	3
SOC	225	Social Diversity	3	0	0	0	3
SOC	230	Race and Ethnic Relations	3	0	0	0	3
SOC	240	Social Psychology	3	0	0	0	3



**GEOGRAPHY**

GEO	111	World Geography	3	0	0	0	3
GEO	112	Cultural Geography	3	0	0	0	3
GEO	130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (3 SHC)**

Choose one course.

**ASTRONOMY**

AST	111	Descriptive Astronomy	3	0	0	0	3
AST	111A	Descriptive Astronomy Lab	0	2	0	0	1

**BIOLOGY**

BIO	110	Principles of Biology	3	3	0	0	4
BIO	111	General Biology I	3	3	0	0	4
BIO	112	General Biology II	3	3	0	0	4
BIO	120	Introductory Botany	3	3	0	0	4
BIO	130	Introductory Zoology	3	3	0	0	4
BIO	140	Environmental Biology	3	0	0	0	3
BIO	140A	Environmental Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM	131	Introduction to Chemistry	3	0	0	0	3
CHM	131A	Intro. to Chemistry Lab	0	3	0	0	1
CHM	132	Organic and Biochemistry	3	3	0	0	4
CHM	151	General Chemistry I	3	3	0	0	4
CHM	152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL	111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY	151	College Physics I	3	2	0	0	4
PHY	152	College Physics II	3	2	0	0	4

**MATHEMATICS**

MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1
Or							
CIS	110	Introduction to Computers	2	2	0	0	3
Or							
CIS	115	Intro. to Prog. & Logic	2	2	0	0	3
Or							
MAT	151	Statistics I	3	0	0	0	3
MAT	151A	Statistics Lab	0	2	0	0	1
Or							
MAT	263	Brief Calculus	3	0	0	0	3
MAT	263A	Brief Calculus Lab	0	2	0	0	1

Hours from mathematics labs will be applied towards Other Required Hours explained below.

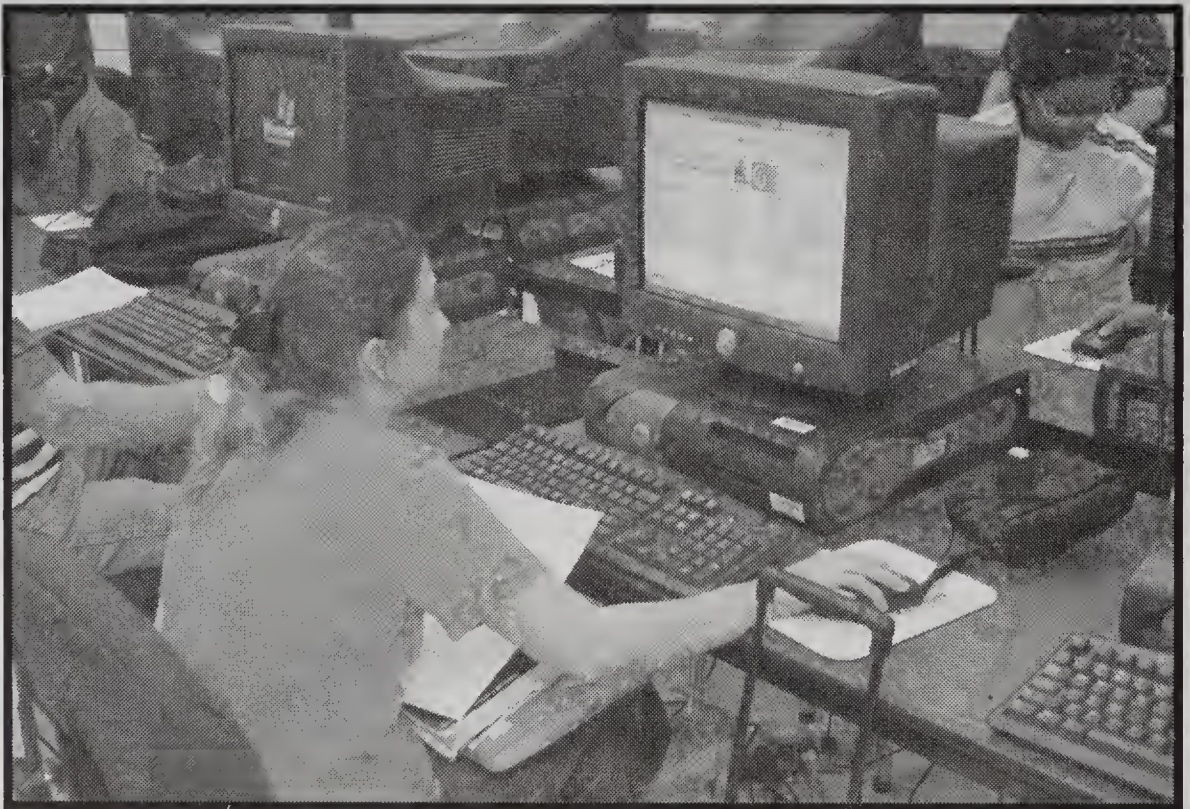
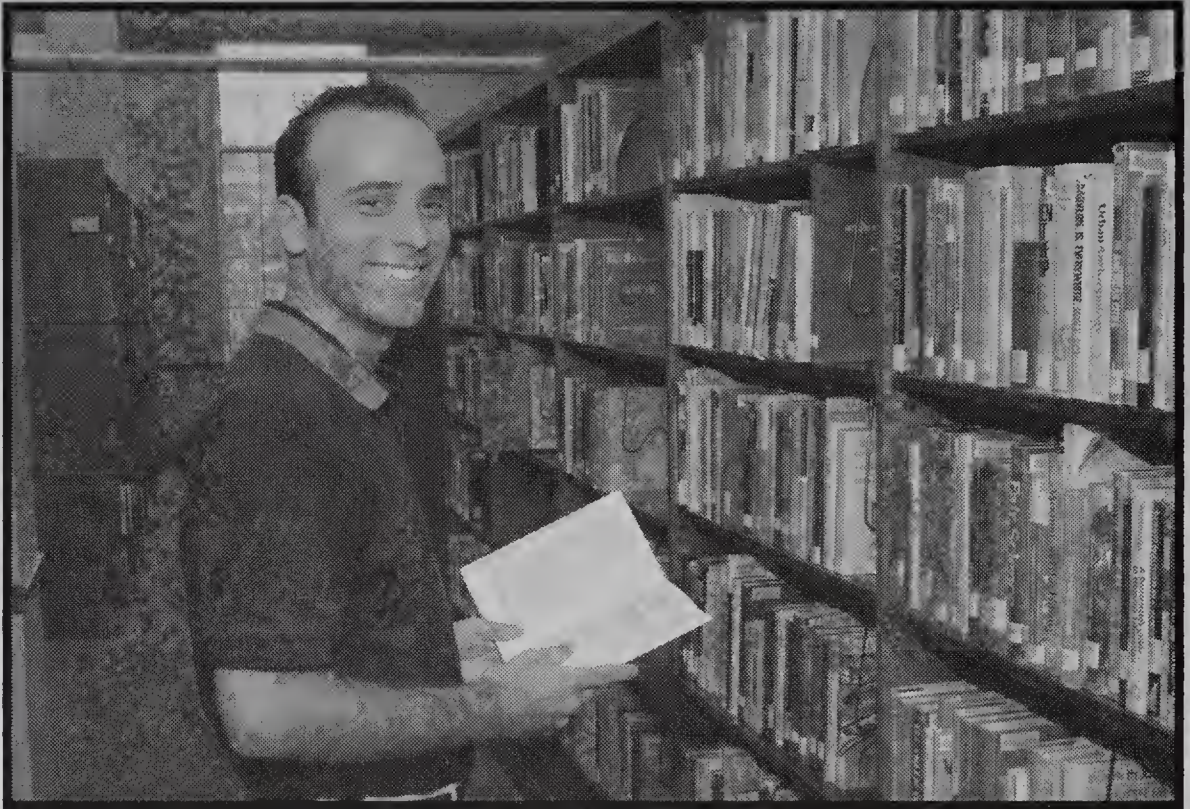
**OTHER REQUIRED HOURS (49-50 SHC)**

Must include additional general education and professional courses that have been approved for transfer and/or approved by the advisor or required for specific AAS Programs.

Total Semester Hours Credit:64-65



# COLLEGE TRANSFER DEGREE PROGRAMS







# Gaston College

Opportunities For Life

2006-2008 Gaston College Academic Catalog

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ASSOCIATE OF APPLIED SCIENCE DEGREES

# Accounting

Associate in Applied Science Degree  
(A25100)

The Accounting curriculum is designed to provide students with the knowledge and skills necessary for employment and growth in the accounting profession. Using the “language of business” and technology resources, accountants assemble, analyze, process, and communicate information about financial operations.

In addition to course work in accounting principles, theories, and practice, students will study business law, finance, management, and economics. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

Gaston College is a candidate for accreditation by the Association of Collegiate Business Schools and Programs.

	Title	Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>						
<b>Fall</b>						
ACC 120	Principles of Financial Accounting	3	2	0	0	4
BUS 115	Business Law I	3	0	0	0	3
CIS 110	Introduction to Computers	2	2	0	0	3
ENG 111	Expository Writing	3	0	0	0	3
	Humanities/Fine Arts Elective	3	0	0	0	<u>3</u>
						16
<b>Spring</b>						
ACC 121	Principles of Managerial Accounting	3	2	0	0	4
ACC 129	Individual Income Taxes	2	2	0	0	3
ACC 149	Intro to Accounting Spreadsheets	1	2	0	0	2
ENG 114	Professional Research & Reporting	3	0	0	0	3
MAT 110	Math 110 or Higher					<u>3</u>
						15
<b>Summer</b>						
ACC 122	Principles of Financial Accounting II	3	0	0	0	3
ACC 140	Payroll Accounting	1	2	0	0	<u>2</u>
						5



SECOND YEAR

Fall						
ACC	130	Business Income Taxes	2	2	0	3
ACC	150	Accounting Software Applications	1	2	0	2
ACC	220	Intermediate Accounting I	3	2	0	4
ACC	225	Cost Accounting	3	0	0	3
ECO	151	Survey of Economics or				
ECO	251	Principles of Microeconomics	3	0	0	3
						15
Spring						
ACC	221	Intermediate Accounting II	3	2	0	4
ACC	269	Auditing & Assurance Services	3	0	0	3
		BUS or COE Electives	6	0	0	6
		(see below)				
		Social/Behavioral Science Elective	3	0	0	3
						16
Total Hours Required for Graduation:						67
Electives (Select 6 credit hours)						
		Any BUS prefix courses				
COE	111	Co-op Work Experience I	0	0	0	1
COE	112	Co-op Work Experience	0	0	0	2
COE	113	Co-op Work Experience	0	0	0	3
COE	121	Co-op Work Experience II	0	0	0	1
COE	122	Co-op Work Experience II	0	0	0	2
COE	123	Co-op Work Experience	0	0	0	3
COE	131	Co-op Work Experience III	0	0	0	1
COE	132	Co-op Work Experience III	0	0	0	2
COE	133	Co-op Work Experience	0	0	0	3

# Architectural Technology

Associate In Applied Science Degree  
(A40100)

The Architectural Technology curriculum prepares individuals with knowledge and skills that can lead to employment in the field of architecture or one of the associated professions.

Students receive instruction in construction document preparation, materials and methods, environmental and structural systems, building codes and specifications, and computer applications. They also complete a design project. Optional courses may be provided to suit specific career needs.

Upon completion, graduates have career opportunities within the architectural, engineering, and construction professions, as well as in industry and government. At participating universities, graduates may continue their education toward a bachelor's degree in related fields.

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>						
ENG	111 Expository Writing	3	0	0	0	3
ENG	114 Prof Research & Report	3	0	0	0	3
	Humanities Elective	3	0	0	0	3
	Social Science Elective	3	0	0	0	3
Math	121 Algebra & Trigonometry	2	2	0	0	3
<b>Major Courses</b>						
ARC	111 Intro to Arch Technology	1	6	0	0	3
ARC	112 Constr Materials/Methods	3	2	0	0	4
ARC	113 Residential Arch Tech	1	6	0	0	3
ARC	114 Architectural CAD	1	3	0	0	2
ARC	131 Building Codes/Laws	2	2	0	0	3
ARC	141 Elm Structures for Arch	4	0	0	0	4
ARC	160 Residential Design	1	6	0	0	3
ARC	211 Light Construction Tech	1	6	0	0	3
ARC	212 Commercial Construction Tec	1	6	0	0	3
ARC	213 Design Project	2	6	0	0	4
ARC	220 Advanced Arch CAD	1	3	0	0	2
ARC	221 Architectural 3D CAD	1	4	0	0	3
ARC	230 Environmental Systems	3	3	0	0	4
CSC	129 Technical Programming	2	3	0	0	3
ERG	115 Intro to Technology	2	3	0	0	3
EGR	115A Intro To Tech/Lab	0	3	0	0	1
SRV	110 Surveying I	2	6	0	0	4
SRV	111 Surveying II	2	6	0	0	4
<b>*Select 3 SHC from the following courses:</b>						
ARC	119 Structural Drafting	2	2	0	0	3
ARC	263 Intro to ADA Title III	1	2	0	0	2
BPR	130 Blueprint Read/Construction	1	2	0	0	2
COE	111 Co-Op Work Experience I	0	0	0	10	1
COE	112 Co-Op Work Experience I	0	0	0	20	2
COE	113 Co-Op Work Experience I	0	0	0	30	3
COE	121 Co-Op Work Experience II	0	0	0	10	1
COE	122 Co-Op Work Experience II	0	0	0	20	2
COE	131 Co-Op Work Experience III	0	0	0	10	1



# Automotive Systems Technology

Associate in Applied Science  
(A60160)

The Automotive Systems Technology curriculum prepares individuals for employment as Automotive Service Technicians. It provides an introduction to automotive careers and increase student awareness of the challenges associated with this fast and ever-changing field.

Classroom and lab experiences integrate technical and academic course work. Emphasis is placed on theory, servicing, and operation of brakes, electrical/electronic systems, engine performance, steering, suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive-trains.

Upon completion of this curriculum, students should be prepared to take the ASE exam, and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

*Admission Information: Valid driver's license required.*

Title			Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
MAT	120	Geometry and Trigonometry	2	2	0	0	3
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Professional Research & Reporting	3	0	0	0	3
		Humanities	3	0	0	0	3
		Social Science	3	0	0	0	3
<b>Major Courses</b>							
AUT	141	Suspension and Steering Systems	2	4	0	0	4
AUT	151	Brake Systems	2	2	0	0	3
AUT	161	Electrical Systems	2	6	0	0	4
AUT	181	Engine Performance-Electrical	2	3	0	0	3
AUT	183	Engine Performance-Fuels	2	3	0	0	3
AUT	185	Emission Controls	1	2	0	0	2
AUT	110	Intro to Auto Technology	2	2	0	0	3
AUT	115	Engine Fundamentals	2	3	0	0	3
AUT	116	Engine Repair	1	3	0	0	2
AUT	152	Brake Systems Lab	0	2	0	0	1
AUT	164	Automotive Electronics	2	2	0	0	3
AUT	171	Heating and Air Conditioning	2	3	0	0	3
AUT	182	Engine Performance-Electrical Lab	0	3	0	0	1
AUT	184	Engine Performance Fuels-Lab	0	3	0	0	1
AUT	221	Automatic Transmissions	2	6	0	0	4
AUT	231	Manual Drive Trains/Axles	2	3	0	0	3
AUT	232	Manual Drive Trains/Axles Lab	0	3	0	0	1
AUT	271	Advanced Heating & Air Conditioning	2	2	0	0	3
CIS	111	Basic PC Literacy	1	2	0	0	2
<b>Select 4 hours from the following:</b>							
AUT	113	Automotive Servicing	2	6	0	0	4
AUT	283	Advanced Electronic Diagnosis	1	2	0	0	2
COE	112	Co-Op Experience I	0	20	0	0	2
COE	122	Co-Op Experience II	0	20	0	0	2

**Total Hours Credit** 66

ASSOCIATE OF APPLIED SCIENCE DEGREES

# Biomedical Equipment Technology

(Collaborative Program with Caldwell Community College and Technical Institute)  
 Associate In Applied Science Degree  
 (A50100)

The Biomedical Equipment Technology curriculum prepares individuals to install, operate, troubleshoot, and repair sophisticated devices and instrumentation used in the health care delivery system. Emphasis is placed on preventive and safety inspections to ensure biomedical equipment meets local and national safety standards.

Course work provides a strong foundation in mathematics, physics, electronics, anatomy, physiology, and troubleshooting techniques. Some courses will include job experience and job shadowing, as well as people skills and communication, both in written and oral form.

Graduates should qualify for employment opportunities in hospitals, clinics, clinical laboratories, shared service organizations, and manufacturers' field service. With an AAS degree and two years experience, an individual should be able to become a certified Biomedical Equipment Technician.

## Special Admission Requirements

1. Health form after acceptance, 2. Current certification in CPR after acceptance

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>						
*COM120	Interpersonal Communication	3	0	0	0	3
*ENG 111	Expository Writing	3	0	0	0	3
*ENG 111A	Expository Writing Lab	0	2	0	0	1
*ENG 114	Professional Research & Reporting					
or						
ENG 113	Literature-Based Research	3	0	0	0	3
*Humanities/Fine Arts Elective		3	0	0	0	3
*Social Science Elective		3	0	0	0	3
*MAT 121	Algebra/Trigonometry I	2	2	0	0	3
<b>Major Courses</b>						
BMT 111	Introduction to Biomedical Field	1	0	0	0	1
BMT 112	Hospital Safety and Standards	2	2	0	0	3
BMT 120	Biomedical Anatomy & Physiology	2	2	0	0	3
BMT 211	Biomedical Measurements	2	2	0	0	3
BMT 212	BMET Instrumentation I	3	6	0	0	6
BMT 213	BMET Instrumentation II	2	3	0	0	3
BMT 223	Imaging Techniques/ Laser Fundamentals	3	2	0	0	4
BMT 225	Biomed Troubleshooting	1	4	0	0	3
*CIS 110	Introduction to Computers	2	2	0	0	3
COE 112	Coop Work Experience I	0	0	0	20	2
COE 115	Work Experience Seminar I	1	0	0	0	1
*ELC 112	DC/AC Electricity	3	6	0	0	5
*ELN 131	Electronic Devices	3	3	0	0	4
*ELN 133	Digital Electronics	3	3	0	0	4
*ELN 232	Introduction to Microprocessors	3	3	0	0	4
*NET 110	Data Communication/Networking	2	2	0	0	3
*PHY 131	Physics-Mechanics	3	2	0	0	4

Total Semester Hours Credits 75

\*Only these courses are available at Gaston College



# Broadcasting and Production Technology

Associate in Applied Science Degree  
(A30120)

ASSOCIATE OF APPLIED SCIENCE DEGREES

Students enrolled in the Broadcasting Production Technology curriculum will develop professional skills in radio, television, audio, video, and related applications.

Training will emphasize speech, script writing, production planning, editing, and post production. Students will also study the development of the broadcasting industry, sales, ethics, law, marketing, and management. Hands-on training and teamwork approaches are essential to the instructional process.

Upon successful completion, students are prepared to enter broadcasting, production, and related industries in a variety of occupations.

Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (18 SHC)</b>					
The following courses are required:					
ENG 111 Expository Writing	3	0	0	0	3
ENG 114 Prof. Research & Report	3	0	0	0	3
COM 231 Public Speaking	3	0	0	0	3
MAT 110 or higher	3	0	0	0	3
MUS 110 Music Appreciation	3	0	0	0	3
Social/Behavioral Sciences Elective	3	0	0	0	3
<b>Major Courses (13 SHC)</b>					
The following courses are required:					
BPT 110 Intro to Broadcasting	3	0	0	0	3
BPT 111 Broadcast Law and Ethics	3	0	0	0	3
BPT 112 Broadcast Writing	3	2	0	0	4
BPT 113 Broadcast Sales	3	0	0	0	3
<b>Other Required Hours (17 SHC)</b>					
The following courses are required:					
BPT 121 Broadcast Speech I	2	3	0	0	3
BPT 131 Audio/Radio Production I	2	6	0	0	4
BPT 191 Selected Topics in Broadcast	1	0	0	0	1
BPT 215 Broadcast Programming	3	0	0	0	3
BPT 231 Video/TV Production I	2	6	0	0	4
COE 111 Co-op Work Experience I	0	0	0	10	1
COE 121 Co-op Work Experience II	0	0	0	10	1
<b>Electives (19 SHC)</b>					
Select 19 hours from the following courses:					
ART 261 Photography I	1	4	0	0	3
ART 262 Photography II	1	4	0	0	3
BPT 115 Public Relations	3	0	0	0	3
BPT 122 Broadcast Speech II	2	3	0	0	3
BPT 132 Audio/Radio Production II	2	6	0	0	4
BPT 135 Radio Performance I	0	6	0	0	2
BPT 136 Radio Performance II	0	6	0	0	2
BPT 137 Radio Performance III	0	6	0	0	2
BPT 210 Broadcast Management	3	0	0	0	3
BPT 220 Broadcast Marketing	3	0	0	0	3
BPT 232 Video/TV Production II	2	6	0	0	2
BPT 235 TV Performance I	0	6	0	0	2

# ASSOCIATE OF APPLIED SCIENCE DEGREES

BPT	236	TV Performance II	0	6	0	0	2
BPT	241	Broadcast Journalism I	3	2	0	0	4
BPT	242	Broadcast Journalism II	3	2	0	0	4
BPT	250	Institutional Video	2	3	0	0	3
BPT	255	Computer-Based Production	2	3	0	0	3
BPT	260	Multi-Track Recording	2	2	0	0	3
BUS	110	Introduction to Business	3	0	0	0	3
BUS	137	Principles of Management	3	0	0	0	3
COE	131	Co-op Work Experience III	0	0	0	10	1
COE	211	Co-op Work Experience IV	0	0	0	10	1
COE	221	Co-op Work Experience V	0	0	0	10	1
COE	231	Co-op Work Experience VI	0	0	0	10	1
CIS	110	Introduction to Computers	2	2	0	0	3
CIS	115	Introduction to Prog. & Logic	2	2	0	0	3
CIS	172	Introduction to the Internet	2	3	0	0	3
(Students may take no more than 9 SHC of MIT courses).							
MIT	115	Intro. to Video Concepts	2	2	0	0	3
MIT	120	Intro. to Audio Concepts	2	2	0	0	3
MIT	215	Video Integration	2	4	0	0	4
MIT	220	Audio Integration	2	4	0	0	4
MKT	120	Principles of Marketing	3	0	0	0	3
MKT	220	Advertising & Sales Promot.	3	0	0	0	3

Total Semester Hours Credit:

67



# Business Administration

Associate in Applied Science Degree  
(A25120)

The Business Administration curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for life-long learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small business and industry.

Gaston College is a candidate for accreditation by the Association of Collegiate Business Schools and Programs.

Title			Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>							
<b>Fall</b>							
ACC	120	Principles Financial Accounting	3	2	0	0	4
BUS	110	Introduction to Business	3	0	0	0	3
BUS	125	Personal Finance	3	0	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
ENG	111	Expository Writing	3	0	0	0	3
LOG	110	Introduction to Logistics	3	0	0	0	<u>3</u>
							19
<b>Spring</b>							
ACC	121	Principles of Managerial Accounting	3	2	0	0	4
BUS	137	Principles of Management	3	0	0	0	3
ENG	114	Professional Research & Reporting					
<b>or</b>							
ENG	112	Argument Based Research	3	0	0	0	3
INT	110	International Business	3	0	0	0	3
MKT	120	Principles of Marketing	3	0	0	0	3
		Humanities Elective	3	0	0	0	<u>3</u>
							19

ASSOCIATE OF APPLIED SCIENCE DEGREES

SECOND YEAR

Fall

BUS	115	Business Law I	3	0	0	0	3
BUS	210	Investment Analysis	3	0	0	0	3
BUS	217	Employment Law and Regulations	3	0	0	0	3
ECO	251	Principles of Microeconomics	3	0	0	0	3
MAT	151	Statistics	3	0	0	0	3
MAT	151A	Statistics Lab or	0	2	0	0	1
MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra-Lab	0	2	0	0	1
		Elective					<u>3</u>
							19

Spring

BUS	116	Business Law II	3	0	0	0	3
BUS	225	Business Finance	2	2	0	0	3
BUS	230	Small Business Management	3	0	0	0	3
BUS	260	Business Communication	3	0	0	0	3
ECO	252	Principles of Macroeconomics	3	0	0	0	3
		Elective					<u>3</u>
							18

Electives (Select 6 credit hours)

Students may take up to 3 hours of Cooperative Work Experience courses.  
(Select 3 credit hours)

BUS	121	Business Math	2	2	0	0	3
BUS	234	Training and Development	3	0	0	0	3
COE	111	Co-op Work Experience	0	0	0	10	1
COE	112	Co-op Work Experience	0	0	0	20	2
COE	113	Co-op Work Experience	0	0	0	30	3
COE	121	Co-op Work Experience	0	0	0	10	1
COE	122	Co-op Work Experience	0	0	0	20	2
COE	131	Co-op Work Experience	0	0	0	10	1
MKT	220	Advertising & Sales Promotion	3	0	0	0	3

Total Hours Required for Graduation: 75



Business Administration

Human Resources Management Concentration

Associate in Applied Science Degree  
(A2512C)

Human Resources Management is a concentration under the curriculum title of Business Administration. The curriculum is designed to meet the demands of business and service agencies. The objective is the development of generalists and specialists in the administration, training, and management of human resources.

Course work includes studies in management, interviewing, placement, needs assessment, planning, compensation and benefits, and training techniques. Also included are topics such as people skills, learning approaches, skills building, and development of instructional and training materials.

Graduates from this program will have a sound business educational base for life-long learning. Students will be prepared for employment opportunities in personnel, training, and other human resources development areas.

Gaston College is a candidate for accreditation by the Association of Collegiate Business Schools and Programs.

Title			Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>							
<b>Fall</b>							
ACC	120	Principles of Financial Accounting	3	2	0	0	4
CIS	110	Intro to Computers	2	2	0	0	3
ENG	111	Expository Writing	3	0	0	0	3
MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1
SPA	111	Elementary Spanish I	3	0	0	0	3
							17
<b>Spring</b>							
BUS	234	Training and Development	3	0	0	0	3
BUS	256	Recruiting Selection and Per Plan	3	0	0	0	3
CIS	152	Database Concepts and Applications	2	2	0	0	3
ENG	114	Professional Research and Reporting	3	0	0	0	3
SPA	112	Elementary Spanish II	3	0	0	0	3
							15
<b>Summer</b>							
ACC	140	Payroll Accounting	1	2	0	0	2

# ASSOCIATE OF APPLIED SCIENCE DEGREES

## SECOND YEAR

### Fall

BUS	115	Business Law I	3	0	0	0	3
BUS	217	Employment Law and Regulations	3	0	0	0	3
BUS	258	Compensation and Benefits	3	0	0	0	3
ECO	251	Principles of Microeconomics	3	0	0	0	3
		Elective					<u>3</u>
							15

### Spring

BUS	137	Principles of Management	3	0	0	0	3
BUS	210	Investment Analysis	3	0	0	0	3
BUS	259	HRM Applications	3	0	0	0	3
BUS	260	Business Communications	3	0	0	0	3
ECO	252	Principles of Macroeconomics	3	0	0	0	3
MKT	120	Principles of Marketing	3	0	0	0	<u>3</u>
							18

### Electives

*Students may take up to 3 hours of Cooperative Work Experience courses.  
(Select 3 credit hours)*

		any BUS prefix course	3	0	0	0	3
COE	111	Co-op Work Experience I	0	0	0	10	1
COE	112	Co-op Work Experience I	0	0	0	20	2
COE	113	Co-op Work Experience	0	0	0	30	3
COE	121	Co-op Work Experience II	0	0	0	10	1
COE	122	Co-op Work Experience II	0	0	0	20	2
COE	131	Co-op Work Experience	0	0	0	10	1
LOG	110	Intro to Logistics	3	0	0	0	3

**Total Hours Required for Graduation: 67**



# Business Administration

## Logistics Management Concentration

Associate in Applied Science Degree  
(A2512E)

Logistics Management is a concentration under the curriculum title of Business Administration. This curriculum prepares students for careers in transportation and warehousing through the study of the principles of organization and management in logistics.

Course work includes the international and domestic movement of goods from the raw materials source(s) through production and ultimately to the consumer. Courses in transportation, warehousing, inventory control, material handling, computerization, and federal transportation and OSHA regulations are emphasized.

Graduates should qualify for employment in logistics-related jobs such as material handling foreman, transportation supervisor, traffic manager, warehouse manager, and inventory control manager.

Gaston College is a candidate for accreditation by the Association of Collegiate Business Schools and Programs.

Title			Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>							
<b>Fall</b>							
ACC	120	Principles of Financial Accounting	3	2	0	0	4
BUS	115	Business Law I	3	0	0	0	3
CIS	110	Intro to Computers	2	2	0	0	3
ENG	111	Expository Writing	3	0	0	0	3
LOG	110	Intro to Logistics	3	0	0	0	<u>3</u>
							16
<b>Spring</b>							
ACC	121	Principles of Managerial Accounting	3	2	0	0	4
ACC	149	Intro to Accounting Spreadsheets	1	2	0	0	2
BUS	116	Business Law II	3	0	0	0	3
BUS	137	Principles of Management	3	0	0	0	3
ENG	114	Professional Research and Reporting	3	0	0	0	3
MKT	120	Principles of Marketing	3	0	0	0	<u>3</u>
							18

ASSOCIATE OF APPLIED SCIENCE DEGREES

# ASSOCIATE OF APPLIED SCIENCE DEGREES

## SECOND YEAR

### Fall

BUS	220	Purchasing	3	0	0	0	3
ECO	251	Principles of Microeconomics	3	0	0	0	3
LOG	120	Global Logistics	3	0	0	0	3
LOG	230	Transportation Management	3	0	0	0	3
MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1
		Humanities Elective	3	0	0	0	<u>3</u>
							19

### Spring

BUS	225	Business Finance	2	2	0	0	3
BUS	231	Computerized Inventory	2	2	0	0	3
ECO	252	Principles of Macroeconomics	3	0	0	0	3
LOG	210	Fleet Management	3	0	0	0	3
LOG	220	Logistics Management	3	0	0	0	3
		Elective (see below)					<u>3</u>
							18

### Electives (Select 3 credit hours)

Students may take up to 3 hours of Cooperative Work Experience courses.  
(Select 3 credit hours)

ACC	225	Cost Accounting	3	0	0	0	3
BUS	121	Business Math	2	2	0	0	3
BUS	234	Training and Development	3	0	0	0	3
COE	111	Co-op Work Experience I	0	0	0	10	1
COE	112	Co-op Work Experience I	0	0	0	20	2
COE	113	Co-op Work Experience	0	0	0	30	3
COE	121	Co-op Work Experience II	0	0	0	10	1
COE	122	Co-op Work Experience II	0	0	0	20	2
COE	131	Co-op Work Experience	0	0	0	10	1
INT	110	International Business	3	0	0	0	3

**Total Hours Required for Graduation: 71**



Civil Engineering Technology

Associate in Applied Science Degree  
(A40140)

The Civil Engineering Technology curriculum provides the application of relevant theory of engineering needed by technicians to carry out planning and supervisory tasks in the construction of transportation systems, residential and commercial buildings, bridges, dams, and water and wastewater treatment systems.

Coursework includes the communication and computational skills required to support the fields such as materials testing, structures, estimating, project management, hydraulics, environmental technology, and surveying. Additional coursework will cover the operation of computers and application software, including computer-aided drafting.

Graduates should qualify for technician level jobs with both public and private engineering, construction, and surveying agencies.

This curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202 — Telephone (410) 347-7700.

This program can be completed using a day sequence.

Title			Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>							
<b>Fall Semester</b>							
CIV	240	Project Management	2	3	0	0	3
CSC	129	Technical Programming	2	3	0	0	3
EGR	115	Introduction to Technology	2	3	0	0	3
EGR	115A	Introduction to Technology Lab	0	3	0	0	1
ENG	111	Expository Writing	3	0	0	0	3
MAT	121	Algebra/Trigonometry I	<u>2</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>3</u>
			11	14	0	0	16
<b>Spring Semester</b>							
CIV	230	Construction Estimating	2	3	0	0	3
ENG	114	Professional Research & Reporting	3	0	0	0	3
MAT	122	Algebra/Trigonometry II	2	3	0	0	3
SRV	110	Surveying I	2	6	0	0	4
		Social Science Elective	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
			12	12	0	0	16
<b>Summer Semester</b>							
CIV	125	Civil/Surveying CAD	1	6	0	0	3
PHY	131	Physics-Mechanics	3	2	0	0	4
		Humanities Elective	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
			7	8	0	0	10

**SECOND YEAR**

**Fall Semester**

CIV	110	Statics/Strength of Materials	2	6	0	0	4
CIV	210	Engineering Materials	1	3	0	0	2
MAT	223	Applied Calculus	2	2	0	0	3
SRV	111	Surveying II	2	6	0	0	4
		Professional Elective					<u>3</u>
			<u>7+</u>	<u>17+</u>	<u>0</u>	<u>0</u>	<u>16</u>

**Spring Semester**

CIV	111	Soils and Foundations	2	3	0	0	3
CIV	211	Hydraulics & Hydrology	2	3	0	0	3
CIV	221	Steel and Timber Design	2	3	0	0	3
CIV	250	Civil Engineering Technology Project1		3	0	0	2
PHY	132	Physics-Electricity & Magnetism	3	2	0	0	4
		Professional Elective					<u>3</u>
			<u>10+</u>	<u>14+</u>	<u>0</u>	<u>0</u>	<u>18</u>

**Total Hours Required for Graduation** **76**

Students must select 6 shc from the following professional electives

Students may take up to 3 shc of Co-op Work Experience courses

CIV	212	Environmental Planning	2	3	0	0	3
CIV	215	Highway Technology	1	3	0	0	2
CIV	220	Basic Structural Concepts	1	3	0	0	2
CIV	222	Reinforced Concrete	2	2	0	0	3
EGR	130	Engineering Cost Control	2	2	0	0	3
SRV	210	Surveying III	2	6	0	0	4
SRV	220	Surveying Law	2	2	0	0	3
SRV	230	Subdivision Planning	1	6	0	0	3
SRV	240	Topo/Site Surveying	2	6	0	0	4
SRV	250	Advanced Surveying	2	6	0	0	4
SRV	260	Field & Office Practices	1	3	0	0	2



# Computer Engineering Technology

Associate in Applied Science Degree  
(A40160)

The Computer Engineering Technology curriculum provides the skills required to install, service, and maintain computers, peripherals, networks, and microprocessor and computer controlled equipment. It includes training in both hardware and software, emphasizing operating systems concepts to provide a unified view of computer systems.

Coursework includes mathematics, physics, electronics, digital circuits, and programming, with emphasis on the operation, use, and interfacing of memory and devices to the CPU. Additional topics may include communications, networks, operating systems, programming languages, Internet configuration and design, and industrial applications.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring a knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

Title			Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>							
<b>Fall Semester</b>							
CET	111	Computer Upgrade/Repair I	2	3	0	0	3
EGR	115	Introduction to Technology	2	3	0	0	3
EGR	115A	Introduction to Technology Lab	0	3	0	0	1
ELN	133	Digital Electronics	3	3	0	0	4
ENG	111	Expository Writing	3	0	0	0	3
MAT	121	Algebra/Trigonometry I	<u>2</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>3</u>
			12	14	0	0	17
<b>Spring Semester</b>							
CSC	129	Technical Programming	2	3	0	0	3
ELC	131	DC/AC Circuit Analysis	4	3	0	0	5
ELN	237	Local Area Networks	2	3	0	0	3
ENG	114	Professional Research & Reporting	3	0	0	0	3
MAT	122	Algebra/Trigonometry II	<u>2</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>3</u>
			13	11	0	0	17
<b>Summer Semester</b>							
ELN	131	Electronic Devices	3	3	0	0	4
PHY	131	Physics-Mechanics	<u>3</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>4</u>
			6	5	0	0	8

ASSOCIATE OF APPLIED SCIENCE DEGREES

**SECOND YEAR**

**Fall Semester**

CSC	134/139	C++ Programming/ Visual BASIC Programming	2	3	0	0	3
CET	211	Computer Upgrade/Repair I	2	3	0	0	3
ELN	132	Linear IC Applications	3	3	0	0	4
ELN	232	Introduction to Microprocessors	3	3	0	0	4
MAT	223	Applied Calculus	<u>2</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>3</u>
			12	14	0	0	17

**Spring Semester**

ELN	233	Microprocessor Systems	3	3	0	0	4
ELN	234	Communication Systems	3	3	0	0	4
		Humanities Elective	3	0	0	0	3
		Social Science Elective	3	0	0	0	3
		Professional Elective	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
			12+	9+	0	0	17

Total Hours Required for Graduation76

Students must select 3 shc from the following professional electives

Students may take up to 3 shc of Co-op Work Experience courses

CIS	110	Introduction to Computers	2	2	0	0	3
ELC	228	PLC Applications	2	6	0	0	4
ELC	231	Electric Power Systems	3	2	0	0	4
ELN	229	Industrial Electronics	2	4	0	0	4
ELN	235	Data Communication Systems	3	3	0	0	4
ELN	237	Local Area Networks	2	3	0	0	3
ELN	238	Advanced LANs	2	3	0	0	3
ELN	260	Programmable Logic Controllers	3	3	0	0	4



# Computer Programming

Associate in Applied Science Degree  
(A2513O)

At the time this catalog was printed, the degree program below was undergoing a major curriculum change that had not been finalized. Please refer to <http://www.gaston.edu/programs/infotech/index.htm> for the most up-to-date information.

The Computer Programming curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations.

Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, software developers, computer operators, systems technicians, database specialists, computer specialists, software specialists, or information systems managers.

Gaston College is a candidate for accreditation by the Association of Collegiate Business Schools and Programs.

	Title	Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>						
<b>Fall</b>						
BUS	110 Introduction to Business	3	0	0	0	3
CIS	110 Introduction to Computers	2	2	0	0	3
CIS	115 Intro to Programming & Logic	2	2	0	0	3
ENG	111 Expository Writing	3	0	0	0	3
MAT	161 College Algebra	3	0	0	0	3
MAT	161ACollege Algebra Lab	0	2	0	0	<u>1</u>
						16
<b>Spring</b>						
ACC	120 Principles of Financial Accounting	3	2	0	0	4
CIS	130 Survey of Operating Systems	2	3	0	0	3
CIS	152 Database Concepts & Apps	2	2	0	0	3
CSC	135 COBOL Programming	2	3	0	0	3
ENG	114 Professional Research & Reporting	3	0	0	0	<u>3</u>
						16
<b>Summer</b>						
CSC	138 RPG Programming	2	3	0	0	3
CSC	235 Advanced COBOL	2	3	0	0	3
	CIS Operating System Elective *	2		0	0	3
	CIS/CSC Elective **	2		0	0	<u>3</u>
						12

## SECOND YEAR

### Fall

CIS	286	Systems Analysis & Design	3	0	0	0	3
CSC	134	C++ Programming	2	3	0	0	3
CSC	139	Visual Basic Programming	2	3	0	0	3
CSC	238	Advanced RPG	2	3	0	0	3
		Social/Behavioral Science Elective	3	0	0	0	<u>3</u>
							15

### Spring

CIS	288	Systems Project	1	4	0	0	3
		CSC Programming Elective ***	2		0	0	3
		CSC Programming Elective ***	2		0	0	3
NET	110	Data Comm/Networking	2	2	0	0	3
		Humanities/Fine Arts Elective	3	0	0	0	<u>3</u>
							15

**Total Hours Required for Graduation: 74**

### \* CIS Operating System Electives:

CIS	147	Operating Systems - Windows	2	2	0	0	3
CIS	148	Operating Systems – Windows NT	2	2	0	0	3
CIS	174	Network System Manager I	2	2	0	0	3
CIS	246	Operating Systems – Unix	2	3	0	0	3

### \*\* CIS/CSC Electives:

(Note that your CIS/CSC Elective must total 3 credit hours)

CIS	153	Database Applications	2	2	0	0	3
CIS	174	Network System Manager I	2	2	0	0	3
CIS	215	Hardware Installation & Maintenance	2	3	0	0	3
CIS	246	Operating Systems – Unix	2	3	0	0	3
CSC	141	Visual C++ Programming	2	3	0	0	3
CSC	148	Java Programming	2	3	0	0	3
CSC	234	Advanced C++	2	3	0	0	3
CSC	239	Advanced Visual Basic	2	3	0	0	3
CSC	241	Advanced Visual C++	2	3	0	0	3
COE	111	Co-op Work Experience I	0	0	0	10	1
COE	112	Co-op Work Experience I	0	0	0	20	2
COE	113	Co-op Work Experience	0	0	0	30	3
COE	121	Co-op Work Experience	0	0	0	10	1
COE	122	Co-op Work Experience	0	0	0	20	2
COE	131	Co-op Work Experience	0	0	0	10	1

### \*\*\* CSC Programming Electives:

(Note that you have two CSC Programming Electives – 6 credit hours)

CSC	141	Visual C++ Programming	2	3	0	0	3
CSC	148	Java Programming	2	3	0	0	3
CSC	234	Advanced C++	2	3	0	0	3
CSC	239	Advanced Visual Basic	2	3	0	0	3
CSC	241	Advanced Visual C++	2	3	0	0	3

Course credits earned in the Major Courses over five years ago will not apply toward the Associate of Applied Science degree in Computer Programming.



# Criminal Justice Technology

Associate in Applied Science Degree  
(A55180)

The Criminal Justice Technology curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security services. The criminal justice system's role within society will be explored.

Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>					
<u>ENGLISH (3HSC)</u>					
ENG 111 Expository Writing	3	0	0	0	3
<b>Select one from the following courses:</b>					
ENG 112 Argument-Based Research	3	0	0	0	3
ENG 114 Prof. Research & Report	3	0	0	0	3
<b>Select one of the following:</b>					
MAT 115 Mathematical Models	2	2	0	0	3
<b>Or</b>					
MAT 140 Survey of Mathematics	3	0	0	0	3
MAT 140A Survey of Math. Lab	0	2	0	0	1
<b>Or</b>					
MAT 151 Statistics I	3	0	0	0	3
MAT 151A Statistics I Lab	0	2	0	0	1
<b>Or</b>					
MAT 161 College Algebra	3	0	0	0	3
MAT 161A College Algebra Lab	0	2	0	0	1
<b>Select 6.0 hours from the Social/Behavioral Sciences:</b>					
ANT 210 Anthropology	3	0	0	0	3
HIS 111 World Civilization I	3	0	0	0	3
HIS 131 American History I	3	0	0	0	3
POL 110 Intro. to Political Science	3	0	0	0	3
POL 120 American Government	3	0	0	0	3
POL 130 State & Local Government	3	0	0	0	3
PSY 150 General Psychology	3	0	0	0	3
SOC 210 Introduction to Sociology	3	0	0	0	3
GEO 111 World Reg. Geography	3	0	0	0	3
<b>Select 3.0 hours from the Humanities/Fine Arts:</b>					
ART 111 Art Appreciation	3	0	0	0	3
MUS 110 Music Appreciation	3	0	0	0	3
ENG 131 Intro to Literature	3	0	0	0	3
ENG 231 American Literature I	3	0	0	0	3
PHI 210 History of Philosophy	3	0	0	0	3

ASSOCIATE OF APPLIED SCIENCE DEGREES

# ASSOCIATE OF APPLIED SCIENCE DEGREES

REL	110	World Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Test.	3	0	0	0	3
REL	212	Intro to New Test.	3	0	0	0	3
HUM	115	Critical Thinking	3	0	0	0	3

## MAJOR COURSES:

CJC	111	Intro to Criminal Justice	3	0	0	0	3
CJC	112	Criminology	3	0	0	0	3
CJC	113	Juvenile Justice	3	0	0	0	3
CJC	131	Criminal Law	3	0	0	0	3
CJC	212	Ethics & Comm Relations	3	0	0	0	3
CJC	221	Investigative Principles	3	2	0	0	4
CJC	231	Constitutional Law	3	0	0	0	3

## Select 12 SHC from the following courses:

CJC	114	Investigative Photography	1	2	0	0	2
CJC	120	Interviews/Interrogations	1	2	0	0	2
CJC	121	Law Enforcement Oper.	3	0	0	0	3
CJC	122	Community Policing	3	0	0	0	3
CJC	132	Court Procedure & Evid.	3	0	0	0	3
CJC	141	Corrections	3	0	0	0	3
CJC	211	Counseling	3	0	0	0	3
CJC	215	Organization & Admin.	3	0	0	0	3
CJC	222	Criminalistics	3	0	0	0	3
CJC	225	Crisis Intervention	3	0	0	0	3
CJC	232	Civil Liability	3	0	0	0	3
CJC	233	Correctional Law	3	0	0	0	3

## ELECTIVES

Select 15.0 SHC from the following courses, one of which must be a computer course:  
(In no event may a student take more than 8 hours of COE).

CIS	110	Introduction to Computers	2	2	0	0	3
CIS	111	Basic PC Literacy	1	2	0	0	2
CJC	151	Intro to Loss Prevention	3	0	0	0	3
CJC	198	Seminar In Issues in CJ	3	0	0	0	3
CJC	213	Substance Abuse	3	0	0	0	3
CJC	214	Victimology	3	0	0	0	3
CJC	223	Organized Crime	3	0	0	0	3
CJC	241	Community-Based Correct.	3	0	0	0	3
COE	111	Co-op Work Exp. I	0	0	0	10	1
COE	112	Co-op Work Exp. I	0	0	0	20	2
COE	113	Co-op Work Exp. I	0	0	0	30	3
COE	114	Co-op Work Exp. I	0	0	0	40	4
COE	121	Co-op Work Exp. II	0	0	0	10	1
COE	122	Co-op Work Exp. II	0	0	0	20	2
COE	123	Co-op Work Exp. II	0	0	0	30	3
COE	124	Co-op Work Exp. II	0	0	0	40	4
COE	131	Co-op Work Exp. III	0	0	0	10	1
COE	132	Co-op Work Exp. III	0	0	0	20	2
COE	133	Co-op Work Exp. III	0	0	0	30	3
COE	134	Co-op Work Exp. III	0	0	0	40	4
COE	211	Co-op Work Exp. IV	0	0	0	10	1
COE	212	Co-op Work Exp. IV	0	0	0	20	2
COE	213	Co-op Work Exp. IV	0	0	0	30	3
COE	214	Co-op Work Exp. IV	0	0	0	40	4
PSY	183	Psychology of Addiction	3	0	0	0	3
SOC	220	Social Problems	3	0	0	0	3

Total Semester Hours Credit:

67-68



# Dietetic Technician

Associate in Applied Science Degree  
(A10300)

This information is in addition to the general admission information found in the Gaston College catalog.

## Curriculum Description

The Dietetic Technician Program prepares individuals to promote optimal health through proper nutrition by providing personalized services to meet client's needs, and ensure balanced diets. Dietetic Technicians work under the supervision of a registered licensed dietitian. Graduates of the Dietetic Technician program are eligible for the national registration examination for dietetic technicians.

Course work includes content related to food, nutrition, communication, and management. The physical, biological, behavioral and social sciences support these areas.

Employment opportunities include childcare centers, hospitals, correctional centers, public health agencies, retirement centers, hospices, clinics, nursing homes, home care programs or medical offices.

All classes are offered on-line via the Internet. Gaston College offers an in-state Distance Education track for all NC residents.

## Accreditation Status

The Dietetic Technician Program at Gaston College received Developmental Accreditation April 20, 2001 from the Commission on Accreditation for Dietetics Education (CADE.) CADE is the accrediting agency for the American Dietetic Association (ADA.) For more information please contact:

*Commission on Accreditation for Dietetics Education  
American Dietetic Association  
120 South Riverside Plaza, Suite 2000  
Chicago, Illinois 60606-6995  
Phone: 312-899-0040 ext. 5400*

## ADMISSION INFORMATION

Students applying for admission to the Gaston College Dietetic Technician program **MUST** meet the following requirements for GENERAL ADMISSION to the college:

1. Submit to the Admissions Office a completed Application for Admission.
2. Request that your high school mail an official high school transcript to the Admissions Office at Gaston College, 201 Highway 321 S., Dallas, NC 28034-1499. The documentation listed below can be submitted in the place of a traditional high school transcript.
  - a. Official Adult High School Transcript
  - b. Official copies of GED scores
  - c. Official transcript from International Correspondence School
  - d. Official transcript from Home School

3. Request that all colleges previously attended submit official transcripts.
4. Schedule and take the placement test. The placement test may not be required of any person who has scored 500 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT. (All test scores must be less than five years old.) A transfer student who has earned a “C” in both college level math and English from a regionally accredited institution shall have the test waived.
5. International students must meet all admission requirements listed under General Admission Requirements. Proof of English proficiency is required. This may be established by making a minimum score of 540 (207 on the computer) on the Test of English as a Foreign Language (TOEFL).
6. Applicants must be at least 18 years old.

## **ADDITIONAL REQUIREMENTS TO BE ELIGIBLE TO SUBMIT AN APPLICATION TO THE DIETETIC TECHNICIAN PROGRAM:**

1. Applicants should be aware that travel in “out-of-service” areas may be required for clinical fieldwork.
2. Must have an **overall grade point average of 2.0 or better** in required college courses.
3. Must have **grades of “C” or better in all related courses**.
4. Must have **completed the required Biology and Chemistry courses within 10 year from the date of application** to the program.
5. **Additional Criteria:** Students may be required to submit documentation of additional non-academic criteria such as, but not limited to, Criminal Background Checks. More information will be available upon acceptance to the program.

## **ALL INFORMATION MUST BE PROVIDED AND APPROVED PRIOR TO ENROLLMENT IN THE PROGRAM.**

6. CPR Certification. The student must be currently certified in infant, child and adult CPR from the American Heart Association, the Red Cross or you may go on line to [www.CPRTODAY.com](http://www.CPRTODAY.com). You must submit a copy of the CPR certification card prior to beginning the program.

The **following criteria** will be utilized by the Admissions Committee in the selection process of recommending applicants for admission to the program:

1. The number of **related courses** completed by end of the fall semester prior to making application.
2. Grade Point Average (GPA) in **related courses**.

The selection of applicants into the Program is based on the above criteria.

## **HEALTH REQUIREMENTS**

1. Physical health is defined as being free of disabling or contagious disease, being able to perform fine and gross motor skills, and being able to perform normal weight-bearing activities.

A completed health form documenting satisfactory emotional and physical health is required before entrance into the program. Date required will be announced by the Dietetic Technician Department Chairperson.



**IMMUNIZATION REQUIREMENTS**

**ALL STUDENTS MUST HAVE THE RESULTS OF A TUBERCULIN SKIN TEST DONE WITHIN ONE YEAR PRIOR TO ENROLLMENT IN THE GASTON COLLEGE DIETETIC TECHNICIAN PROGRAM.**

- a. STUDENTS 18 YEARS OF AGE OR OLDER, BORN IN 1957 OR LATER.  
 REQUIRED:        3 DTP or Td doses  
                      1 MEASLES (Rubeola) dose, on or after 15 months of age.\*  
                      1 RUBELLA dose on or after 15 months of age.\*\*  
                      1 MUMPS dose on or after 15 months of age.  
                      1 Td dose within the last 10 years.  
                      1 MEASLES, MUMPS, RUBELLA (MMR) booster dose in 1980 or later.
  
- b. STUDENTS BORN PRIOR TO 1957.  
 REQUIRED:        3 DTP or Td doses  
                      1 RUBELLA dose. \*\*  
                      1 Td dose within the last 10 years.
  
- c. STUDENTS OVER 50 YEARS OF AGE.  
 REQUIRED:        3 DTP or Td doses.  
                      1 Td dose within the last 10 years.
  
- d. History of varicella (chicken pox) **OR** Varcilla Titer. (History of varicella is acceptable without physician verification.)

\* History of physician diagnosed measles is acceptable.

\*\* ONLY laboratory proof of immunity to rubella is acceptable (Rubella titer). Rubella is not required if 50 years or older.

The Hepatitis B Vaccine (recommended immunization) must be completed (series of three (3) injections) by the end of the spring semester, Freshman Year.

**Note:**  
 Those students who do not pursue immunization for Hepatitis B will required to sign a waiver releasing Gaston College and the Dietetic Technician Program of any responsibility for the possibility of their contracting Hepatitis B.

- 2. Emotional health is defined as reacting appropriately to stressful situations, withstanding everyday environmental stresses with little difficulty, using healthy coping mechanisms, and understanding one’s own ability to cope with stressful situations.

**Assessment of emotional health of applicants is made through the use of physical examinations, references, letters from psychiatrists or therapists if intensive therapy is in progress or has occurred, and psychological evaluations, if necessary.**

- 3. **Communication:** Gaston College will communicate with Dietetic Technician students by means of e-mail, telephone answering machines, and the US mail service.

DIETETIC TECHNICIAN

The Dietetic Technician program prepares individuals to promote optimal health through proper nutrition by providing personalized services to meet client’s needs, and ensure balanced diets. Dietetic Technicians work under the supervision of a registered licensed dietitian.

Course work includes content related to food, nutrition, communication and management. The physical, biological, behavioral and social sciences support these areas.

Employment opportunities include childcare centers, hospitals, correctional centers, public health agencies, retirement centers, rehabilitation centers, hospices, clinics, nursing homes, home care programs or medical offices.

All classes are offered on-line via the Internet. Gaston College offers an in-state Distance Education track for all NC residents.

	Title	Class	Lab	Clinical	Work	Credits
<b>First Semester</b>						
DET	110 Dietetic Technician I	6	0	6	0	8
BIO	163 Basic Anatomy & Physiology	4	2	0	0	5
ENG	111 Expository Writing	3	0	0	0	3
PSY	150 General Psychology	3	0	0	0	3
<b>Second Semester</b>						
DET	120 Dietetic Technician III	6	0	9	0	9
CHM	130 & 130A Gen. Org. & Biochemistry/lab	3	2	0	0	4
DET	115 Dietetic Technician II	2	0	0	0	2
MAT	110+	3	0	0	0	3
<b>Third Semester</b>						
DET	210 Dietetic Technician IV	6	0	9	0	9
BIO	275 Microbiology	3	3	0	0	4
PSY	241 Developmental Psychology	3	0	0	0	3
ENG	114 Professional Research & Reporting	3	0	0	0	3
<b>Fourth Semester</b>						
DET	220 Dietetic Technician V	6	0	12	0	10
COE	111 Co-op Work Experience I	0	0	10	0	1
DET	225 Dietetic Technician VI	2	0	0	0	2
	Humanities	3	0	0	0	3
<b>Total semester hours credit:</b>						<b>72</b>



Early Childhood Associate

Associate in Early Childhood  
(A55220)

The Early Childhood Associate curriculum prepares individuals to work with children from infancy through middle childhood in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with parents and children. Students will foster the cognitive/language, physical/motor, social/emotional and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school age programs.

Title			Class	Lab	Clinical	Work	Credits
General Education Courses							
ENG	111	Expository Writing	3	0	0	0	3
ENG	112	Argument-Based Research	3	0	0	0	3
COM	120	Interpersonal Commun.	3	0	0	0	3
BIO	140	Environmental Biology	3	0	0	0	3
BIO	140A	Environmental Bio. Lab	0	3	0	0	1
PSY	150	General Psychology	3	0	0	0	3
MUS	110	Music Appreciation	3	0	0	0	3
MAT	140	Survey of Mathematics	3	0	0	0	3
or							
MAT	115	Mathematical Models	3	0	0	0	3
Major Courses:							
COE	111	Co-op Work Experience I	0	0	0	10	1
COE	115	Work Exp. Seminar I	1	0	0	0	1
EDU	119	Early Childhood Education	4	0	0	0	4
EDU	131	Child, Family, and Comm.	3	0	0	0	3
EDU	144	Child Development I	3	0	0	0	3
EDU	145	Child Development II	3	0	0	0	3
EDU	146	Child Guidance	3	0	0	0	3
EDU	151	Creative Activities	3	0	0	0	3
EDU	153	Health, Safety, & Nut.	3	0	0	0	3
EDU	221	Children w/Exceptionalities	3	0	0	0	3
EDU	234	Infants, Toddlers, & Twos	3	0	0	0	3
EDU	251	Exploration Activities	3	0	0	0	3
EDU	259	Curriculum Planning	3	0	0	0	3
EDU	271	Educational Technology	2	2	0	0	3
EDU	280	Literacy Experiences	3	0	0	0	3
EDU	288	Advanced Issues	2	0	0	0	2

# ASSOCIATE OF APPLIED SCIENCE DEGREES

Select one of the following:

EDU 250 is recommended.

EDU 250	PRAXIS I Preparation	1	0	0	0	1
COE 121	Co-op Work Exp. II	0	0	0	10	2

Total Semester Hours Credit: 67- 69



# Electronics Engineering Technology

Associate in Applied Science Degree  
(A40200)

The Electronics Engineering Technology curriculum prepares individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems, such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems.

A broad-based core of courses, including basic electricity, solid-state fundamentals, digital concepts, and microprocessors, ensures the student will develop the skills necessary to perform entry-level tasks. Emphasis is placed on developing the student's ability to analyze and troubleshoot electronic systems.

Graduates should qualify for employment as engineering assistants or electronic technicians with job titles such as electronics engineering technician, field service technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

This curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202 — Telephone (410) 347-7700.

This program can be completed using either a day or evening sequence.

Title			Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>							
<b>Fall Semester</b>							
CET	111	Computer Upgrade/Repair I	2	3	0	0	3
EGR	115	Introduction to Technology	2	3	0	0	3
EGR	115A	Introduction to Technology Lab	0	3	0	0	1
ELN	133	Digital Electronics	3	3	0	0	4
ENG	111	Expository Writing	3	0	0	0	3
MAT	121	Algebra/Trigonometry I	<u>2</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>3</u>
			12	14	0	0	17
<b>Spring Semester</b>							
ELC	131	DC/AC Circuit Analysis	4	3	0	0	5
ELN	150	CAD for Electronics	1	3	0	0	2
ENG	114	Professional Research & Reporting	3	0	0	0	3
MAT	122	Algebra/Trigonometry II	2	2	0	0	3
PHY	131	Physics-Mechanics	<u>3</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>4</u>
			13	10	0	0	17
<b>Summer Semester</b>							
ELC	133	Advanced Circuit Analysis	2	3	0	0	3
ELN	131	Electronic Devices	<u>3</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>4</u>
			5	6	0	0	7

**SECOND YEAR**

**Fall Semester**

ELN	132	Linear IC Applications	3	3	0	0	4
ELN	232	Introduction to Microprocessors	3	3	0	0	4
MAT	223	Applied Calculus	2	2	0	0	3
		Humanities Elective	3	0	0	0	3
		Social Science Elective	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
			14	8	0	0	17

**Spring Semester**

EGR	285	Design Project	0	4	0	0	2
ELN	233	Microprocessor Systems	3	3	0	0	4
ELN	234	Communication Systems	3	3	0	0	4
PHY	132	Physics-Electricity & Magnetism	3	2	0	0	4
		Professional Elective	<u>9+</u>	<u>12+</u>	<u>0</u>	<u>0</u>	<u>3</u>
					0	0	17

Total Hours Required for Graduation75

Students must select 3 shc from the following professional electives

Students may take up to 3 shc of Co-op Work Experience courses

CET	211	Computer Repair/Upgrade II	2	3	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
CSC	129	Technical Programming	2	3	0	0	3
ELC	228	PLC Applications	2	6	0	0	4
ELC	231	Electric Power Systems	3	2	0	0	4
ELN	229	Industrial Electronics	2	4	0	0	4
ELN	235	Data Communication Systems	3	3	0	0	4
ELN	237	Local Area Networks	2	3	0	0	3
ELN	238	Advanced LANs	2	3	0	0	3
ELN	260	Programmable Logic Controllers	3	3	0	0	4



# Emergency Medical Science – Paramedic

Associate in Applied Science Degree  
(A45340)

The Emergency Medical Science curriculum is designed to prepare graduates to enter the workforce as paramedics. Additionally, the program can provide an Associate Degree for individuals desiring an opportunity for career enhancement.

The course of study provides the student an opportunity to acquire basic and advanced life support knowledge and skills by utilizing classroom instruction, practical laboratory sessions, hospital clinical experience, and field internship with emergency medical services agencies.

Students progressing through the program may be eligible to apply for both state and national certification examinations. Employment opportunities include ambulance services, fire and rescue agencies, air medical services, specialty areas of hospitals, industry, educational institutions, and government agencies.

## ADMISSION INFORMATION

Students applying for admission to the Gaston College Emergency Medical Science Program **MUST** meet the following requirements for GENERAL ADMISSION to the college:

1. Complete general admission application
2. Completion of Compass test. The compass test may be waived of any person who has completed a College level English and Math or scored 520 on the verbal section and 500 on the math section of the SAT. Compass test and completion of any identified developmental courses or remediation are required prior to acceptance in the EMS program.
3. Submit an official transcript from home school, adult high school, international correspondence school, or high school with graduation date or G.E.D. scores (minimum score of 225 and no sub score less than 35.)
4. Submit official college transcript(s), when applicable
5. Applicants from countries whose language is not English must demonstrate proficiency in the English language by scoring no less than **540** on the **Test of English as a Foreign Language (TOEFL)**.

## Additional Requirements To Be Eligible For Admission To The EMS Program:

1. Must submit a minimum HOBET (Health Occupations Basic Entrance Test) score of the following: Post High School level in Science Reading Comprehension and High School level in General Mathematics.
2. Must have a minimum of grade “C” in all courses listed as part of the EMS Degree program.
3. Must have completed the related BIO courses within 10 years of the date of enrollment in the EMS prefix courses.
4. United States resident applicants whose primary language is not English will be required to demonstrate proficiency in the English language. This may include scoring no less than 540 on the TOEFL. The Department Director/Chairperson of the EMS Program, in consultation with the Dean of Health Education, will determine the means of demonstrating proficiency on an individual basis.

5. Must submit a current Adult and Infant CPR certification prior to entrance into the program.
6. A completed North Carolina Community College Student Medical Form documenting satisfactory emotional, physical health and immunizations is required.
7. Criminal Background Checks and Drug Screening: In order to comply with current Student Affiliation Agreements students accepted into the Emergency Medical Science Program will be required to submit a Criminal Background Check and Drug Screening according to Gaston College procedures prior to placement in a clinical facility. The facility reserves the right to deny the student access to the facility. If the student is denied access, the student will not be allowed to enroll in the program. Completion of clinical experiences is required for the satisfactory completion of the program. More information will be provided upon conditional acceptance into the program.

## ADMISSIONS SELECTION PROCESS

The EMS program director considers the following in the selection process for acceptance into the Emergency Medical Science program:

1. Health Occupation Basic Entrance Test (HOBET) Scores
2. EMS Program Application and Supporting Documents.

The selection of applicants is based on the above criteria. Students will be notified regarding their admission status.

A completed North Carolina Community College Student Medical Form documenting satisfactory emotional and physical health is required before entrance into the program by date to announced by the EMS program director.

The required related courses will be offered on either the Gaston College Dallas campus or the Gaston College Lincolnton campus.

Students are responsible for their own transportation to and from all clinical, laboratory, and class activities. Clinical and EMS field internship experiences may be scheduled mornings, afternoons or evenings and weekends.

Students who seek credit for EMT-Basic Certification, taken through continuing education, may petition the EMS program director for permission to seek Course Credit by examination, transfer credit, or experiential credit with National Registry of EMT-Basic or Intermediate registration.



Emergency Medical Science –Paramedic

Associate Degree  
A45340

ASSOCIATE OF APPLIED SCIENCE DEGREES

Title	Class	Lab	Clinical	Work	Credits
<b>First Semester I</b>					
EMS 110* EMT Basic (prerequisite for EMS 120)	5	6	0	0	7
BIO 168* Anatomy-Physiology I (prerequisite for EMS 120)	3	3	0	0	4
<b>Semester Total:</b>	<b>8</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>11</b>
<b>Second Semester I</b>					
EMS 120* Intermediate Intervention	2	3	0	0	3
EMS 130* Pharmacology I for EMS	1	2	0	0	2
EMS 121* EMS Clinical Practicum I	0	0	6	0	2
EMS 131* Advanced Airway Mgt.	1	2	0	0	2
EMS 210* Advanced Patient Assessment	1	3	0	0	3
<b>Semester Total:</b>	<b>5</b>	<b>10</b>	<b>6</b>	<b>0</b>	<b>12</b>
<b>Third Semester I</b>					
EMS 220* Cardiology	3	3	0	0	4
EMS 250* Advanced Medical Emergencies	2	3	0	0	3
EMS 260* Advanced Trauma Emergencies	1	3	0	0	2
EMS 221* EMS Clinical Practicum II	0	0	9	0	3
ENG 111* Expository Writing	3	0	0	0	3
<b>Semester Total:</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>0</b>	<b>15</b>
<b>Fourth Semester II</b>					
EMS 231* EMS Clinical Practicum III	0	0	9	0	3
EMS 240* Special Needs Patient	1	2	0	0	2
EMS 270* Life Span Emergencies	2	2	0	0	3
EMS 285* EMS Capstone	1	3	0	0	2
<b>Semester Total:</b>	<b>4</b>	<b>7</b>	<b>9</b>	<b>0</b>	<b>10</b>
<b>Fifth Semester II</b>					
BIO 169 Anatomy-Physiology II	3	3	0	0	4
ENG 112 or Argument Based Research					
ENG 113 or Literature Based Research	3	0	0	0	3
ENG 114 Professional Research-Reporting					
EMS 140* Rescue Scene Management	1	3	0	0	2
Humanities Elective	3	0	0	0	3
<b>Semester Total:</b>	<b>10</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>12</b>
<b>Sixth Semester II</b>					
BIO 275 Microbiology	3	3	0	0	4
EMS 150* Emergency Vehicles- EMS Communications	1	3	0	0	2
EMS 235 EMS Management	2	0	0	0	2
EMS 241 EMS Clinical Practicum IV	0	0	9	0	3
PSY 150 General Psychology	3	0	0	0	3
<b>Semester Total:</b>	<b>9</b>	<b>6</b>	<b>9</b>	<b>0</b>	<b>14</b>
<b>Total Semester Hour Credits:</b>					<b>74</b>

\* Required courses for paramedic certification

# Emergency Medical Services Bridging Program

Associate in Applied Science Degree for Paramedics  
(A45340B)

The EMS Bridging Program was developed to allow current certified non-degree Paramedics to earn a two-year Associate of Applied Science Degree in Emergency Medical Science by completing (EMS Bridging course, Rescue Scene Management, EMS Management) and all other general education requirements for this degree.

## Admission Information

- Complete Gaston College Admission Office requirements
- College application
- Compass Testing
- Official high school transcript or GED certificate
- Official college transcript(s)
- Applicants from countries whose language is not English must demonstrate proficiency in the English language by scoring no less than **540** on the **Test of English as a Foreign Language (TOEFL)**.

## Specific Requirements for the EMS Bridging Program

- Complete an EMS Program application and NC medical form
- Possess a North Carolina Driver’s License
- Complete an Interview with the EMS Department Director
- NREMT-P registration and current Paramedic Certification, test scores, EMS continuing education records, and current Basic Life Support CPR certification\*, current ACLS provider\*, current PALS provider\*, BTLS or PHTLS course or equivalent\* (copies of certification cards and continuing education records during the current certification period must be submitted to the Gaston College EMS Education, 201 Highway 321 South, Dallas, NC 28034.)
- Current or past affiliation with an ALS system as evidenced by the signature of the director of the EMS agency with which the paramedic is affiliated.
- NREMT-P certification prior to completion of the program.

\* Copies of all current certifications must be on file in the EMS department at Gaston College.

The above certifications and experience will provide up to 40 Semester hours of proficiency credit toward the A.A.S. degree in EMS. The semester hours represent the major area (EMS) courses required for EMT-Basic, EMT-Intermediate, and Paramedic certification that are not requirements of the EMS Bridge Program.



	Title	Class	Lab	Clinical	Work	Credits
ENG 111	Expository Writing	3	0	0	0	3
<b>One of the three English courses</b>						
	ENG 112 or 113 or 114	3	0	0	0	3
PSY 150	General Psychology	3	0	0	0	3
BIO 275	Microbiology	3	3	0	0	4
BIO 168	Anatomy & Physiology I					
	<b>OR</b> A & P transfer BIO 165-166	3	3	0	0	4
BIO 169	Anatomy & Physiology II	3	3	0	0	4
<b>ART;COM;ENG;MUS,PHI, REL; LANGUAGES</b>						
	Humanities Elective (Choose one)	3	0	0	0	3
EMS 140	Rescue Scene Management					
	<b>OR</b> current NC ERT certification	1	3	0	0	2
EMS 235	EMS Management	2	0	0	0	2
EMS 280	EMS Bridging Program	2	2	0	0	3

Total Semester Hour Credits:31

7 hours residency requirement to graduate from Gaston College

- \* NREMT-P Required to receive transfer credit for Paramedic Continuing Education Program by the completion of the program.
- \* RT with NC Fire Commission official documentation to receive transfer credit for EMS140.
- \* Most of courses are offered on-line. Contact the EMS program director for further information.

# Fire Protection Technology

Associate In Applied Science Degree  
(A55240)

The Fire Protection Technology curriculum is designed to provide individuals with technical and professional knowledge to make decisions regarding fire protection for both public and private sectors. It also provides a sound foundation of continuous higher learning in fire protection, administration, and management.

Course work includes classroom and laboratory exercise to introduce the students to various aspects of fire protection. Students will learn technical and administrative skills such as hydraulics, hazardous materials.

Title	Class	Lab	Clinical	Work	Credits
FIP 120 Intro. to Fire Protection	3	0	3		
* FIP 124 Fire Prev. & Public Ed.	3	0	3		
* FIP 220 Fire Fighting Strategies	3	0	3		
FIP 128 Detection & Investigation	3	0	3		
* FIP 132 Building Construction	3	0	3		
FIP 140 Industrial Fire Protect.	3	0	3		
FIP 136 Inspection & Codes	3	0	3		
FIP 144 Sprinklers & Auto Alarms	2	2	3		
FIP 152 Fire Protection Law	3	0	3		
* FIP 224 Instructional Methodology	4	0	4		
FIP 228 Local Govt. Finance	3	0	3		
* FIP 232 Hydraulics & Water Dist.	2	2	3		
FIP 230 Chem of Hazardous Mat.	5	0	5		
FIP 236 Emergency Management	3	0	3		
* FIP 240 Fire Service Supervision	3	0	3		
FIP 252 Apparatus Spec & Purch	3	0	3		
FIP 256 Munic Public Relations	3	0	3		
* FIP 276 Managing Fire Services	3	0	3		
<b>General Education Courses</b>					
ENG 111 Expository Writing	3	0	3		
ENG 114 Prof Research & Report	3	0	3		
Humanities Elective	3	0	3		
Social Science Elective	3	0	3		
MAT 115 Mathematical Models	3	0	3		
CIS 110 Introduction to Computers	2	2	3		

Total Semester Credit Hours:75

\* Students pursuing a 4 year degree should take a minimum of college Algebra (MAT 161) for the Math and a Foreign Language for the humanities elective.



# General Occupational Technology

Associate in Applied Science Degree  
(A55280)

The General Occupation Technology curriculum provides individuals with an opportunity to upgrade skills and to earn an associate degree, diploma, and/or certificate by taking courses suited for individual occupational interests and/or needs.

The curriculum content will be customized for students according to their occupational interests and needs. A program of study for each student will be selected from any non-developmental level courses (100-189 or 200-289) offered by the College.

Graduates will become more effective workers, better qualified for advancements within their field of employment, and become qualified for a wide range of entry-level employment opportunities.

Title		Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>						
ACA	118 College Study Skills	1	2	0	0	2
ENG	111 Expository Writing	3	0	0	0	3
ENG	114 Prof Research/Report	3	0	0	0	3
Humanities/Fine Arts Elective (any H/FA elective accepted for an AA degree)		3	0	0	0	3
Social/Behavioral Science Elective (an S/BS elective accepted for an AA degree)		3	0	0	0	3
<b>Natural Science/Mathematics</b>						
<b>Mathematics (choose one)</b>						
MAT	110 Mathematical Measurements	3	0	0	0	3
MAT	115 Mathematical Models	3	0	0	0	3
MAT	120 Geometry & Trigonometry	3	0	0	0	3
MAT	121 Algebra/Trigonometry	2	2	0	0	3
MAT	151 Statistics I	3	0	0	0	3
<b>and</b>						
MAT	151A Statistics I Lab	0	2	0	0	1
MAT	161 College Algebra	3	0	0	0	3
<b>and</b>						
MAT	161A College Algebra Lab	0	2	0	0	1
<b>Science</b>						
Any lab science course (BIO, CHM, PHS, PHY)		3	2/3	0	0	4
<b>Major Courses</b>						
CIS	110 Intro to Computers	2	2	0	0	3
<b>or</b>						
EGR	115 Intro to Technology	2	3	0	0	3
<b>and</b>						
EGR	115A Intro to Technology Lab	0	3	0	0	1
<b>and</b>						
42 SHC from a combination of core courses for AAS curricula approved to be offered at Gaston College						42

and...

Choose one:

FRE 111	Elementary French I	3	0	0	0	3
SPA 111	Elementary Spanish I	3	0	0	0	3
SPA 120	Spanish for the Workplace	3	0	0	0	3

COE cannot exceed 8 SHC

Total Semester Hours Credit	69-71
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# Industrial Engineering Technology

Associate in Applied Science Degree (A40240)  
(Includes Bioprocessing Career Option)

The Industrial Engineering Technology curriculum prepares graduates to perform as technical leaders in manufacturing and service organizations. The curriculum incorporates the study and application of methods and techniques for developing, implementing and improving integrated systems involving people, material, equipment and information.

The coursework emphasizes analytical and problem-solving techniques for process development and improvement. The curriculum includes systems analysis, quality and productivity improvement techniques, cost analysis, facilities planning, organizational management, effective communications, and computer usage as a problem-solving tool.

Graduates of the curriculum should qualify for positions in a wide range of manufacturing and service organizations. Employment opportunities include industrial engineering technology, quality assurance, supervision, team leadership, and facilities management. Certification is available through organizations such as ASQ, SME, and APICS.

This curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202—Telephone (410) 347-7700.

This program can be completed using either a day or evening sequence.

	Title	Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>						
<b>Fall Semester</b>						
DFT 170	Engineering Graphics	2	2	0	0	3
EGR 115	Introduction to Technology	2	3	0	0	3
EGR 115A	Introduction to Technology Lab	0	3	0	0	1
ISC 112	Industrial Safety	2	0	0	0	2
ISC 128	Industrial Leadership	2	0	0	0	2
MAT 121	Algebra/Trigonometry I	2	2	0	0	3
MEC 145	Manufacturing Materials I	2	3	0	0	3
<b>Or</b>						
BIO 111	General Biology I	3	3	0	0	4
		13/12	13/13	0	0	18/17
<b>Spring Semester</b>						
ENG 111	Expository Writing	3	0	0	0	3
ISC 132	Manufacturing Quality Control	2	3	0	0	3
MAT 122	Algebra/Trigonometry II	2	3	0	0	3
BPM 110	Biomanufacturing Practice	3	4	0	0	5
<b>And</b>						
CHM 131	Introduction to Chemistry	0	3	0	0	1
<b>And</b>						
CHM 131A	Introduction to Chemistry Lab	3	0	0	0	3
<b>Or</b>						
Humanities Elective		3	0	0	0	3
<b>And</b>						
MEC 245	Manufacturing Materials II	2	3	0	0	3
<b>And</b>						
Professional Elective				0	0	3
		13/12	12/8	0	0	18/18

<b>Summer Semester</b>						
ENG	114	Professional Research and Reporting	3	0	0	3
ISC	255	Engineering Economy	2	2	0	3
		Humanities Elective	3	0	0	3
<b>Or</b>						
PHY	131	Physics-Mechanics	<u>3</u>	<u>2</u>	<u>0</u>	<u>4</u>
			8/8	2/4	0	9/10

SECOND YEAR

<b>Fall Semester</b>						
ISC	136	Productivity Analysis I	2	3	0	3
ISC	243	Production and Operations Management I	2	3	0	3
MAT	223	Applied Calculus	2	3	0	3
<b>Or</b>						
MAT	151	Statistics I	3	0	0	3
<b>And</b>						
MAT	151A	Statistics I Lab	0	2	0	1
		Social Science Elective	3	0	0	3
		Professional Elective				2
<b>Or</b>						
BIO	280	Biotechnology	<u>2</u>	<u>3</u>	<u>0</u>	<u>3</u>
			12/11	13/10	0	15/16

<b>Spring Semester</b>						
ISC	236	Productivity Analysis II	2	3	0	3
ISC	244	Production and Operations Management II	2	3	0	3
ISC	256	Systems Design	2	3	0	3
		Professional Elective				2
PHY	132	Physics-Electricity and Magnetism	3	2	0	4
<b>Or</b>						
CHM	132	Organic and Biochemistry	<u>3</u>	<u>3</u>	<u>0</u>	<u>4</u>
			9/9	12/11	0	15/15

Total Hours Required for Graduation75/76

Students must select 5 shc from the following professional electives  
 Students may take up to 3 shc of Co-op Work Experience courses

CSC	129	Technical Programming	2	3	0	3
EGR	285	Design Project	0	4	0	2
ISC	222	Project Planning/Control	1	2	0	2
ISC	230	Simulation Production Processes	1	3	0	2
ISC	233	Industrial Organization and Management	3	0	0	3
ISC	237	Quality Management	2	3	0	3



# Information Systems

Associate in Applied Science Degree  
(A2526O)

At the time this catalog was printed, the degree program below was undergoing a major curriculum change that had not been finalized. Please refer to <http://www.gaston.edu/programs/infotech/index.htm> for the most up-to-date information.

The Information Systems curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible program designed to meet community information systems needs.

Course work includes computer systems terminology and operations, logic, operating systems, database, data communications/networking, and related business topics. Studies will provide experience for students to implement, support, and customize industry-standard information systems.

Graduates should qualify for a wide variety of computer-related, entry-level positions that provide opportunities for advancement with increasing experience and ongoing training. Duties may include systems maintenance and troubleshooting, support and training, and business applications design and implementation.

Gaston College is a candidate for accreditation by the Association of Collegiate Business Schools and Programs.

	Title	Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>						
<b>Fall</b>						
CIS	110 Introduction to Computers	2	2	0	0	3
CIS	115 Intro to Programming & Logic	2	2	0	0	3
CIS	172 Intro to the Internet	2	3	0	0	3
ENG	111 Expository Writing	3	0	0	0	3
MAT	161 College Algebra	3	0	0	0	3
MAT	161A College Algebra Lab	0	2	0	0	<u>1</u>
						16
<b>Spring</b>						
CIS	120 Spreadsheet I	2	2	0	0	3
CIS	130 Survey of Operating Systems	2	3	0	0	3
CIS	147 Operating Systems – Windows	2	2	0	0	3
CIS	152 Database Concepts & Applications	2	2	0	0	3
ENG	114 Professional Research & Reporting	3	0	0	0	<u>3</u>
						15
<b>Summer</b>						
BUS	110 Introduction to Business	3	0	0	0	3
CIS	153 Database Applications	2	2	0	0	3
CIS	220 Spreadsheet II	1	2	0	0	2
OST	136 Word Processing	1	2	0	0	2
	Humanities/Fine Arts Elective	3	0	0	0	<u>3</u>
						13

SECOND YEAR

Fall

CIS	162	MM Presentation Software	2	2	0	0	3
CIS	215	Hardware Installation & Maintenance	2	3	0	0	3
CSC	139	Visual Basic Programming	2	3	0	0	3
OST	236	Advanced Word/Info Procedures	2	2	0	0	3
		Social/Behavioral Science Elective	3	0	0	0	<u>3</u>
							15

Spring

CIS	121	User Support & Software Evaluation	1	4	0	0	3
CIS	225	Integrated Software	1	2	0	0	2
CSC	160	Intro to Internet Programming	2	2	0	0	3
NET	110	Data Comm./Networking	2	2	0	0	3
OST	233	Office Publications Design	2	2	0	0	<u>3</u>
							14

Total Hours Required for Graduation: 73

Course credits earned in the Major Courses over five years ago will not apply toward the Associate of Applied Science degree in Information Systems.



# Information Systems – Network Administration & Support

Associate in Applied Science Degree  
A2526D

At the time this catalog was printed, the degree program below was undergoing a major curriculum change that had not been finalized. Please refer to <http://www.gaston.edu/programs/infotech/index.htm> for the most up-to-date information.

Network Administration and Support is a concentration under the curriculum title of Information Systems. This curriculum prepares students to install and support networks and develops strong analytical skills and extensive computer knowledge.

Course work includes extensive hands-on experience with networks. Classes cover media types, topologies, and protocols with installation and support of hardware and software, troubleshooting network and computer problems, and administrative responsibilities.

Graduates should qualify for positions such as: LAN/PC administrator, microcomputer support specialist, network control operator, communications technician/analyst, network/computer consultant, and information systems specialist. Graduates should be prepared to sit for certification exams, which can result in industry-recognized credentials.

Gaston College is a candidate for accreditation by the Association of Collegiate Business Schools and Programs.

	Title	Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>						
<b>Fall</b>						
CIS	110 Introduction to Computers	2	2	0	0	3
CIS	115 Intro to Programming & Logic	2	2	0	0	3
CIS	172 Intro to the Internet	2	3	0	0	3
MAT	161 College Algebra	3	0	0	0	3
MAT	161ACollege Algebra-Lab	0	2	0	0	1
NET	110 Data Comm./Networking	2	2	0	0	<u>3</u>
						16
<b>Spring</b>						
CIS	130 Survey of Operating Systems	2	3	0	0	3
CIS	152 Database Concepts & Apps	2	2	0	0	3
CIS	173 Network Theory	2	2	0	0	3
CIS	174 Network System Manager I	2	2	0	0	3
CIS	175 Network Management I	2	2	0	0	<u>3</u>
						15
<b>Summer</b>						
BUS	110 Introduction to Business	3	0	0	0	3
CIS	246 Operating System - UNIX	2	3	0	0	3
ENG	111 Expository Writing	3	0	0	0	3
NET	175 Wireless Technology	2	2	0	0	<u>3</u>
						12

SECOND YEAR

Fall

CIS	215	Hardware Installation & Maintenance	2	3	0	0	3
CIS	274	Network System Manager II	2	2	0	0	3
CIS	275	Network Management II	2	2	0	0	3
CSC	134	C++ Programming	2	3	0	0	3
NET	125	Routing and Switching I	1	4	0	0	3
		Social/Behavioral Science Elective	3	0	0	0	<u>3</u>
							18

Spring

CIS	287	Network Support	2	2	0	0	3
CSC	160	Intro to Interhet Programming	2	2	0	0	3
ENG	114	Professional Research and Reporting	3	0	0	0	3
NET	126	Routing and Switching II	1	4	0	0	3
		Humanities/Fine Arts Elective	3	0	0	0	<u>3</u>
							15

Total Hours Required for Graduation: 76

Course credits earned in the Major Courses over five years ago will not apply toward the Associate of Applied Science degree in Information Systems – Network Administration and Support.



# Internet Technologies

Associate in Applied Science Degree  
(A25290)

At the time this catalog was printed, the degree program below was undergoing a major curriculum change that had not been finalized. Please refer to <http://www.gaston.edu/programs/infotech/index.htm> for the most up-to-date information.

The Internet Technologies curriculum is designed to prepare graduates for employment with organizations that use computers to disseminate information via the Internet internally, externally, and/or globally. The curriculum will prepare students to create and implement these services.

Course work includes computer and Internet terminology and operations, logic, operating systems, database and data communications/networking, and related topics. Studies will provide opportunities for students to implement, support, and customize industry-standard Internet technologies.

Graduates should qualify for career opportunities as webmasters, Internet and intranet administrators, Internet applications specialists, Internet programmers and Internet technicians. Government institutions, industries, and other organizations employ individuals who possess the skills taught in this curriculum.

Gaston College is a candidate for accreditation by the Association of Collegiate Business Schools and Programs.

	Title	Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>						
<b>Fall</b>						
CIS	110 Introduction to Computers	2	2	0	0	3
CIS	115 Intro to Programming & Logic	2	2	0	0	3
CIS	172 Intro to the Internet	2	3	0	0	3
ENG	111 Expository Writing	3	0	0	0	3
MAT	161 College Algebra	3	0	0	0	3
MAT	161A College Algebra Lab	0	2	0	0	<u>1</u>
						16
<b>Spring</b>						
CIS	152 Database Concepts & Apps	2	2	0	0	3
CSC	160 Intro to Internet Programming	2	2	0	0	3
ITN	140 Web Development Tools	2	2	0	0	3
NET	110 Data Comm./Networking	2	2	0	0	3
	Humanities/Fine Arts Elective	3	0	0	0	<u>3</u>
						15
<b>Summer</b>						
CIS	147 Operating System – Windows	2	2	0	0	3
CIS	153 Database Applications	2	2	0	0	3
CIS	246 Operating System – UNIX	2	3	0	0	3
ITN	160 Principles of Web Design	2	2	0	0	<u>3</u>
						12

SECOND YEAR

Fall

CSC	134	C++ Programming	2	3	0	0	3
CSC	139	Visual Basic Programming	2	3	0	0	3
ITN	150	Internet Protocols	2	2	0	0	3
ITN	180	Active Server Programming	2	2	0	0	3
		Social/Behavioral Science Elective					<u>3</u>
							15

Spring

CET	245	Internet Servers	2	2	0	0	3
CSC	148	Java Programming	2	3	0	0	3
ENG	114	Professional Research & Reporting	3	0	0	0	3
ITN	170	Intro to Internet Databases	2	2	0	0	3
ITN	260	Intro to E-Commerce	2	2	0	0	<u>3</u>
							15

Total Hours Required for Graduation: 73

Course credits earned in the Major Courses over five years ago will not apply toward the Associate of Applied Science degree in Internet Technologies.



# Machining Technology

Associate in Applied Science Degree  
(A50300)

The Machining Technology curriculum is designed to develop skills in the theory and safe use of hand tools, power machinery, computerized equipment, and sophisticated precision inspection instruments.

Students will learn to interpret blueprints, set up manual and CNC machines, perform basic and advanced machining operations, and make decision to insure that work quality is maintained.

Employment opportunities for machining technicians exist in manufacturing industries, public institutions, governmental agencies, and a wide range of specialty machining job shops.

Title			Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
		Humanities Elective	3	0	0	0	3
		Social Science Elective	3	0	0	0	3
MAT	120	Geometry and Trigonometry	2	2	0	0	3
<b>Major Courses</b>							
BPR	111	Blueprint Reading	1	2	0	0	2
BPR	121	Blueprint Reading: Mech	1	2	0	0	2
DFT	121	Intro to GD & T	1	2	0	0	2
MAC	111	Machining Technology I	2	12	0	0	6
MAC	112	Machining Technology II	2	12	0	0	6
MAC	113	Machining Technology III	2	12	0	0	6
MAC	114	Intro to Metrology	2	0	0	0	2
MAC	121	Intro to CNC	2	0	0	0	2
MAC	122	CNC Turning	1	3	0	0	2
MAC	124	CNC Milling	1	3	0	0	2
MAC	222	Advanced CNC Turning	1	3	0	0	2
MAC	224	Advanced CNC Milling	1	3	0	0	2
MAC	231	CNC Graphics Prog: Turning	1	4	0	0	3
MAC	232	CNC Graphics Prog:Mill	1	4	0	0	3
<b>*Select 8 SHC From the following courses:</b>							
MAC	243	Die Making I	2	6	0	0	4
MAC	245	Mold Construction	2	6	0	0	4
COE	111	Co-Op Work Experience I	0	0	0	10	1
COE	112	Co-Op Work Experience I	0	0	0	20	2
COE	113	Co-Op Work Experience I	0	0	0	30	3
COE	121	Co-Op Work Experience II	0	0	0	10	1
COE	122	Co-Op Work Experience II	0	0	0	20	2
COE	123	Co-Op Work Experience II	0	0	0	30	3
COE	131	Co-Op Work Experience III	0	0	0	10	1
COE	132	Co-Op Work Experience III	0	0	0	20	2
COE	133	Co-Op Work Experience III	0	0	0	30	3
COE	211	Co-Op Work Experience IV	0	0	0	10	1
COE	212	Co-Op Work Experience IV	0	0	0	20	2
COE	213	Co-Op Work Experience IV	0	0	0	30	3

Total Semester Hours Credit:

65

See your academic advisor or division dean for appropriate selection of humanities/social/behavioral science elective.

# Mechanical Engineering Technology

Associate in Applied Science Degree  
(A40320)

The Mechanical Engineering Technology curriculum prepares graduates for employment as mechanical technicians. Typical assignments would include assisting in the design, development, testing and repair of mechanical equipment. Emphasis is placed on the integration of theory and mechanical principles.

Coursework includes applied mechanics, manufacturing methods and processes, computer usage, computer-aided drafting, mathematics, physics, and oral and written communications. The courses will stress critical thinking, planning, and problem solving.

Graduates of the curriculum will find employment opportunities in the diversified branches of the mechanical field. Mechanical engineering technicians are employed in many types of manufacturing, fabrication, research and development, and service industries.

This curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202 — Telephone (410) 347-7700.

This program can be completed using either a day or evening sequence.

Title			Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>							
<b>Fall Semester</b>							
DFT	170	Engineering Graphics	2	3	0	0	3
EGR	115	Introduction to Technology	2	3	0	0	3
EGR	115A	Introduction to Technology Lab	0	3	0	0	1
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
MEC	145	Manufacturing Materials I	2	3	0	0	3
ELN	133	Digital Electronics	3	3	0	0	4
<b>Or</b>							
DFT	121	Introduction to Geometric Dimensioning & Tolerancing	1	2	0	0	2
<b>And</b>							
ENG	111	Expository Writing	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
			11/12	17/16	0	0	17/18
<b>Spring Semester</b>							
ATR	112	Introduction to Automation	2	2	0	0	3
MAT	122	Algebra/Trigonometry II	2	2	0	0	3
MEC	161	Manufacturing Processes I	3	0	0	0	3
MEC	161A	Manufacturing Processes I Lab	0	3	0	0	1
CSC	129	Technical Programming	2	3	0	0	3
<b>And</b>							
DFT	151	CAD I	2	3	0	0	3
<b>Or</b>							
ELC	131	AC/DC Circuit Analysis	4	3	0	0	5
<b>And</b>							
ENG	111	Expository Writing	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
			11/14	10/13	0	0	18/16



Summer Semester

ENG	114	Professional Research and Reporting	3	0	0	0	3
PHY	131	Physics-Mechanics	3	2	0	0	4
		Professional Elective					3
Or							
ELN	131	Electronic Devices I	<u>3</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>4</u>
			8+	5+	0	0	11/10

SECOND YEAR

Fall Semester

MAT	223	Applied Calculus	2	2	0	0	3
MEC	265	Fluid Mechanics	2	2	0	0	3
		Social Science Elective	3	0	0	0	3
CIV	110	Statics and Strength of Materials	2	6	0	0	4
And							
DFT	153	CAD III	2	3	0	0	3
Or							
ELN	232	Intro to Microprocessors	3	3	0	0	4
And							
CSC	129	Technical Programming	<u>2</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
			12/11	10/13	0	0	16/16

Spring Semester

EGR	285	Design Project	0	4	0	0	2
		Humanities Elective	3	0	0	0	3
PHY	132	Physics-Electricity and Magnetism	3	2	0	0	4
ELN	260	Programmable Logic Controllers	3	3	0	0	4
Or							
MEC	267	Thermal Systems	2	2	0	0	3
And							
MEC	270	Machine Design	<u>3</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>4</u>
			9/11	9/11	0	0	13/16

Total Hours Required for Graduation

75-76

Students must select 3 shc from the following professional electives

Students may take up to 3 shc of Co-op Work Experience courses

ATR	112	Introduction to Automation	2	3	0	0	3
ATR	211	Robot Programming	2	3	0	0	3
DFT	112	Technical Drafting II	1	3	0	0	2
DFT	231	Jig and Fixture Design	1	2	0	0	2
DFT	243	Basic Die Design	2	6	0	0	4
MAC	121	Introduction to CNC	2	0	0	0	2
MAC	122	CNC Turning	1	3	0	0	2
MEC	111	Machine Processes I	2	3	0	0	3
MEC	112	Machine Processes II	2	3	0	0	3
MEC	161	Manufacturing Processes I	3	0	0	0	3
MEC	275	Engineering Mechanisms	2	2	0	0	3
MEC	283	Introduction to CAM	2	3	0	0	3
PLA	120	Injection Molding	2	3	0	0	3
PLA	162	Plastics Manufacturing Processes	2	3	0	0	3
PLA	230	Advanced Plastic Manufacturing	3	3	0	0	4

## Medical Assisting

Associate in Applied Science Degree  
(A45400)

The Medical Assisting Curriculum prepares the graduate to be a multi-skilled practitioner qualified to perform administrative, clinical and laboratory procedures. Course work includes instruction in scheduling appointments, coding and processing insurance accounts, billing, collections, medical transcription, computer operations; assisting with examinations/treatments, performing routine laboratory procedures, electrocardiography, supervised medication administration; and ethical/legal issues associated with patient care.

Graduates of CAAHEP-accredited programs may be eligible to sit for the American Association of Medical Assistants' Certification Examination to become Certified Medical Assistants. Employment Opportunities include physicians' offices, health maintenance organizations, health departments, and hospitals. The Gaston College Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Committee on Accreditation for Medical Assistant Education.\*

\*aka The Curriculum Review Board of the American Association of Medical Assistants' Endowment (AAMAE)

### ADMISSION REQUIREMENTS

Individuals applying for admission to the Gaston College Medical Assisting Program must meet the requirements for general admission to Gaston College and the requirements for admission into the Medical Assisting Program.

APPLICANTS WILL BE CONTACTED FOR AN ADMISSION INTERVIEW BY THE MEDICAL ASSISTING DEPARTMENT AFTER RECEIPT OF THE MEDICAL ASSISTING PROGRAM APPLICATION. ACCEPTANCE LETTERS WILL BE MAILED TO QUALIFIED APPLICANTS AFTER THE ADMISSION INTERVIEW AND VERIFICATION OF FILES BEING COMPLETE THROUGH THE GASTON COLLEGE ADMISSIONS OFFICE (ACT/SAT SCORES, COLLEGE PLACEMENT TEST, AND TRANSCRIPTS).

PLEASE COMPLETE THE ADMISSION PROCESS IN THE ORDER LISTED BELOW:

1. Complete the Gaston College Application (this form can be obtained from the Admissions Office: 704/922-6214 or through the Gaston College web page: [www.gaston.edu](http://www.gaston.edu))
2. Complete the Gaston College Medical Assisting Program Application form (this form can be requested through the Medical Assisting Office: 704/922-6377).
3. Schedule and take the College Placement Test to determine Math and English placement at Gaston College (this can be scheduled through the Admissions Office: 704/922-6214). **Applicants must complete any identified developmental courses (MAT 060, MAT 070, ENG 090, RED 090, and SCI 090) in order to receive full acceptance into the program.** Individuals who have completed college level Math or English courses with a grade of "C or higher do not have take the college placement test Students who score 500 or higher on the verbal portion of the SAT are not required to take the Writing and Reading



portions of the placement test. Students who score 520 or higher on the Mathematics portion of the SAT are not required to take the Mathematics portion of the placement test. Official test score results must be no more than 5 years old and they must be received and evaluated by the Office of Admissions.

Students who score a 21 or higher on the English portion of the ACT will be exempted from the Writing and Reading portions of the college's placement test. Students who score a 21 or higher on the mathematics portion of the ACT will be exempted from the math portion of the college's placement test.

4. **NOTE: The ACT exam is taken in addition to the College Placement Test.** Applicants should schedule and take the ACT examination to determine acceptance scores for admission into the Medical Assisting Program. Contact the counseling Center: (704/922-6220) for instructions on registering for the ACT. Individuals with a previous college degree will have the ACT/SAT examination waived with proof of graduation from an accredited college.
5. Submit an official copy of High School Transcript with graduation date or GED transcript with graduation date directly to the Admissions Office. (Have your High School mail this for you.)
6. Submit an official College Transcript directly to the Admissions Office if you have attended any other college (if applicable, have your college mail this for you). Enrollment in the Medical Assisting Program is limited to 45 students. Applicants are advised to apply early.

## ADMISSION STATUS

Students meeting all admission requirements will be considered for full admission status.

Students who have not met all of the requirements for full admission may still be considered for possible conditional acceptance as determined by the Medical Assisting Department Chairperson. Students accepted through conditional acceptance will be allowed to take Medical Assisting courses for one semester while working toward meeting full acceptance requirements.

Applicants will be notified by mail of their admission status by the Department Chairperson of Medical Assisting. Those students who are not admitted to the Medical Assisting Program must reapply. Students reapplying for admission must meet the admission requirements current at the time of their application and must submit a new application. Conditional acceptances are not granted for readmissions.

## ENGLISH AS A SECOND LANGUAGE

United States resident applicants whose primary language is not English will be required to demonstrate proficiency in the English language. This may include scoring no less than 540 (207 on the computer) on the TOEFL (Test of English as a Foreign Language). The Department Chairperson of the Medical Assisting Program, in consultation with the Dean of Health Education, will determine the means of demonstrating proficiency on an individual basis.

## HEALTH REQUIREMENTS

The following are special health requirements that are to be met by all medical assisting students:

1. A physical exam is due on the date stated in the applicant's admission letter. The form, "Student Medical Form for Programs that Require Health Forms in the North Carolina Community College System Institutions", will be mailed with the applicant's admission letter. The form must be completed in its entirety and must demonstrate evidence of a physical exam within 6 months prior to the date of the submission of the form. The form must document satisfactory emotional and physical health.
2. Prospective students with known or suspected communicable or other serious illnesses are ethically and legally obligated to evaluate their health status in light of client safety. In addition, a physician's statement documenting that the disease state is resolved or adequately controlled must be provided.
3. The health form must be completed by a duly licensed physician, physician assistant, or nurse practitioner and must be submitted to the Medical Assisting Department by the specified deadline given to students.
4. Two out of the series of three Hepatitis B Vaccine (required immunization) must be completed by the end of the fall semester, Freshman year, unless proof is provided from a physician as to why the student should not take this vaccine or proof is provided showing the student has had the vaccine within the past 5-7 years and is "immune".

Those students who do not pursue immunization for Hepatitis B will be required to sign a waiver releasing Gaston College and the Medical Assisting Program of any responsibility for the possibility of their contracting Hepatitis B. (Waiver may be picked up in the Medical Assisting Office.)

A complete listing of the immunization requirements for NC Students entering college can be found on the last page of the Medical Assisting Program Application.

5. Enrolled students should report any changes in health status to the department chairperson immediately. Documentation of satisfactory emotional and physical health may be required to remain in the program.

## GENERAL PROGRAM INFORMATION

1. A minimum grade of "C" (80%) in all Medical Assisting courses is necessary for progression in the Medical Assisting program. In courses that have a lab component, students must receive a passing grade in both theory and classroom skills procedures in order to pass the course.
2. A Medical Assisting student should complete all related courses prior to entering the fifth (last) semester of the program. Related courses are those that do not have the "MED" prefix.
3. Professional liability insurance (malpractice insurance) is required for students after admission to the Program. This insurance is arranged through the Medical Assisting



Program and the premium is paid by the student at the appropriate time. (at the beginning of the first semester and again at the beginning of the fourth semester of the program).

- Criminal Background Checks and Drug Screening: In order to comply with current Student Affiliation Agreements students accepted into the Associate Degree Medical Assisting Program will be required to submit a Criminal Background Check and Drug Screening according to Gaston College procedures prior to placement in a clinical facility. The facility reserves the right to deny the student access to the facility. If the student is denied access, the student will not be allowed to complete the program. Completion of clinical experiences is required for the satisfactory completion of the program. More information will be provided upon acceptance into the program.
- Keyboarding Skills: All Medical Assisting students must demonstrate a working knowledge of the current keyboarding/word processing software in use in the campus computer labs at time of program entry. This applies to any keyboarding class transferred into the program from other colleges and/or one taken at Gaston College prior to program entry. Students not demonstrating this proficiency will be expected to take OST 131 as a credit course.

A minimum grade of “C” is necessary in OST 131 before the student can take MED 134 (Medical Transcription). Students desiring to challenge out of OST 131 (credit by exam) will be expected to do so at a rate equal to or higher than thirty-five (35) words per minute with no more than three (3) errors on a 3-minute timing.

- OSHA Safety Training: All students enrolled in the Medical Assisting Program are required to participate in OSHA Bloodborne Pathogens and HazCom Safety training sessions.

NOTE: All information should be accurate to the best of the applicant’s knowledge. Giving false information or withholding necessary information to the college/program may result in dismissal from the college/program. Questionable situations shall be discussed with the Department Chairperson and the Dean of Health Education.

Medical Assisting A45400

Title	Class	Lab	Clinical	Work	Credits
<b>First Semester (FALL)</b>					
MED 110 Orientation to Medical Assisting	1	0	0	0	1
MED 121 Medical Terminology I	3	0	0	0	3
ENG 111 Expository Writing	3	0	0	0	3
OST 131 Keyboarding	1	2	0	0	2
BIO 168 Anatomy & Physiology I	<u>3</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>4</u>
	<b>11</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>13</b>
<b>Second Semester (SPRING)</b>					
MED 122 Medical Terminology II	3	0	0	0	3
BIO 169 Anatomy & Physiology II	3	3	0	0	4
HUMANITIES ELECTIVE	3	0	0	0	3
MED 140 Exam Room Procedures I	3	4	0	0	5
PSY 150 General Psychology	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
	<b>15</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>18</b>

ASSOCIATE OF APPLIED SCIENCE DEGREES

Third Semester (SUMMER)

MED 134	Medical Transcription	2	2	0	0	3
MED 130	Admin. Office Procedures I	1	2	0	0	2
ENG 112*	Argument-Based Research	3	0	0	0	3
MED 150	Laboratory Procedures I	<u>3</u>	<u>4</u>	<u>0</u>	<u>0</u>	<u>5</u>
		9	8	0	0	13

Fourth Semester (FALL)

MED 250	Laboratory Procedures II	3	4	0	0	5
MED 270	Symptomatology	2	2	0	0	3
MED 240	Exam Room Procedures II	3	4	0	0	5
MED 131	Admin. Office Procedures II	<u>1</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>2</u>
		9	12	0		15

Fifth Semester (SPRING)

MED 230	Admin. Office Procedures III	1	2	0	0	2
MED 264	Medical Assisting Overview	2	0	0	0	2
MED 118	Medical Law & Ethics	2	0	0	0	2
MED 272	Drug Therapy	3	0	0	0	3
MED 260	Clinical Externship	0	0	15	0	5
MED 262	Clinical Perspectives	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>
		9	2	15	0	15

\*Student may substitute ENG 114: Professional Research & Reporting

Total Hours Required for Graduation						74
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# Medical Office Administration

Associate in Applied Science Degree  
(A25310)

This curriculum prepares individuals for employment in medical and other health-care related offices.

Course work will include medical terminology; information systems; office management; medical coding, billing and insurance; legal and ethical issues; and formatting and word processing. Students will learn administrative and support functions and develop skills applicable in medical environments.

Employment opportunities are available in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other health-care related organizations.

Gaston College is a candidate for accreditation by the Association of Collegiate Business Schools and Programs.

Title			Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>							
<b>Fall</b>							
BIO	163	Basic Anatomy and Physiology	4	2	0	0	5
CIS	110	Introduction to Computers	2	2	0	0	3
ENG	111	Expository Writing	3	0	0	0	3
OST	131	Keyboarding	1	2	0	0	2
OST	141	Medical Terms I-Med Office	3	0	0	0	<u>3</u>
							16
<b>Spring</b>							
OST	132	Keyboard Skill Building	1	2	0	0	2
OST	136	Word Processing	1	2	0	0	2
OST	142	Medical Terms II-Med Office	3	0	0	0	3
OST	149	Medical Legal Issues	3	0	0	0	3
OST	164	Text Editing Applications	3	0	0	0	3
		Elective					<u>2</u>
							15
<b>Summer</b>							
ENG	114	Prof. Research & Reporting or					
ENG	112	Argument Based Research	3	0	0	0	3
OST	236	Adv. Word/Information Proc.	2	2	0	0	3
PSY	150	General Psychology	3	0	0	0	3
		Humanities Elective	3	0	0	0	<u>3</u>
							12

ASSOCIATE OF APPLIED SCIENCE DEGREES

**SECOND YEAR**

**Fall**

BUS	121	Business Math	2	2	0	0	3
COM	120	Interpersonal Communication	3	0	0	0	3
OST	134	Text Entry and Formatting	2	2	0	0	3
OST	148	Med. Coding, Billing & Insurance	3	0	0	0	3
OST	241	Med Office Transcription I	1	2	0	0	<u>2</u>
							14

**Spring**

OST	135	Advanced Text Entry & Formatting	3	2	0	0	4
OST	184	Records Management	1	2	0	0	2
OST	243	Medical Office Simulation	2	2	0	0	3
OST	284	Emerging Technologies	1	2	0	0	2
OST	286	Professional Development	3	0	0	0	<u>3</u>
							14

**Total Hours Required for Graduation:** **71**

**Electives (Select 2 credit hours)**

ACC	115	College Accounting	3	2	0	0	4
BUS	110	Introduction to Business	3	0	0	0	3
BUS	115	Business Law I	3	0	0	0	3
BUS	125	Personal Finance	3	0	0	0	3
BUS	260	Business Communications	3	0	0	0	3
CIS	120	Spreadsheet I	2	2	0	0	3
CIS	172	Intro to the Internet	2	3	0	0	3
COE	111	Co-op Work Experience I	0	0	0	10	1
COE	112	Co-op Work Experience I	0	0	0	20	2
COE	121	Co-op Work Experience II	0	0	0	10	1
OST	122	Co-op Office Computations	1	2	0	0	2
OST	137	Office Software Applications	1	2	0	0	2

**Course credits (OST and CIS) earned over five years ago will not apply toward the Associate of Applied Science degree in Medical Office Administration.**

Credits toward the AAS may be given to persons who have earned the Certified Professional Secretary designation. For further information, persons holding this certification should contact the Chairperson of Office Systems Technology.



## Nursing (Registered Nursing)

### LPN to RN Alternate Schedule Option

Associate in Applied Science Degree

A45100

The Associate Degree Nursing curriculum provides individuals with the knowledge and skills necessary to provide nursing care to clients and groups of clients throughout the lifespan in a variety of settings.

Courses will include content related to the nurse's role as a provider of nursing care, as a manager of care, as a member of the discipline of nursing, and as a member of the interdisciplinary team.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN) which is required for practice as a Registered Nurse. Employment opportunities include hospitals, long term facilities, clinics, physicians' offices, industry, and community agencies.

### ADMISSION INFORMATION

Students applying for admission to the LPN to RN Alternate Schedule Option of the Gaston College Associate Degree Nursing Program MUST meet the following requirements for GENERAL ADMISSION to Gaston College:

1. Submit to the Admissions Office a completed Application for Admission.
2. Submit official transcript from home school, international correspondence school, or high school with graduation date for GED.
3. Completion of the COMPASS/ASSET (College's placement test) is required if the student has not completed developmental or college level English AND math. The Writing and Reading portions of the College's placement test can be waived if the student scores 500 or higher on the Verbal or Critical Reading portion of the SAT. The Mathematics portion of the College's placement test can be waived if the student scores 520 or higher on the Mathematics portion of the SAT. Students who score a 21 or higher on the Mathematics portion of the ACT will be exempted from the Writing and Reading portions of the College's placement test. Students who score a 21 or higher on the Mathematics portion of the ACT will be exempted from the Math portion of the College's placement test. Official test score results must be no more than 5 years old, and they must be received and evaluated by the Office of Admissions. The COMPASS/ASSET test and completion of any identified developmental courses are required prior to acceptance into the LPN to RN option.
4. Submit official college transcript(s), when applicable.
5. Applicants from countries whose language is not English must demonstrate proficiency in the English language by scoring no less than 540 (207 on the computer) on the Test of English as a Foreign Language (TOEFL). United States resident applicants whose primary spoken language is not English will be required to demonstrate English proficiency. This may be established by scoring no less than 540 (207 on the computer) on the TOEFL.

## ADDITIONAL REQUIREMENTS TO BE ELIGIBLE TO SUBMIT AN APPLICATION TO THE ASSOCIATE DEGREE NURSING PROGRAM'S LPN TO RN ALTERNATE SCHEDULE OPTION:

1. Complete nursing admission application.
2. Provide the Associate Degree Nursing Department with a copy of current unrestricted license to practice practical nursing.
3. Must have graduated from an approved Practical Nursing program within the last year or have 1 year documented work experience as an LPN in the last 2 years prior to admission to the program.
4. Must submit a minimum composite score of 21 on the American College Test (ACT) or 1000 on the Scholastic Aptitude Test (SAT). Must be taken within 5 years of the date of application. The ACT score or the SAT score requirement will be waived for students who hold a baccalaureate or higher degree from an accredited college or university.

OR

Complete BIO 168, BIO 169 and BIO 275 with a cumulative 2.65 grade point average. Transfer credit for equivalent biology courses taken at an institution other than Gaston College will be considered to fulfill these criteria and will require departmental approval.

AND

Cumulative 2.65 grade point average in LPN nursing courses

5. BIO 168, 169, and 275 may be accepted if completed within 10 years of application to the nursing program.
6. An overall 2.0 average must be attained in related course work completed before admission to the nursing sequence. The student must achieve a minimum grade of "C" in all non-nursing courses required in the associate degree nursing curriculum.
7. Students are required to provide proof of current CPR certification (adult, infant, child and FBAO certification). The ultimate responsibility of maintaining current CPR certification will be assumed by THE STUDENT. STUDENTS WILL NOT BE PERMITTED IN THE CLINICAL AREA UNLESS CPR CERTIFICATION IS CURRENT.
8. The following criteria, developed by the nursing faculty, will be utilized by the Nursing Department Admissions Committee in the selection process for admission to the program:
  - a. ACT/SAT score or Baccalaureate or higher degree  
or  
cumulative GPAs on biology courses and cumulative GPAs in LPN nursing courses
  - b. The number of co-requisite courses completed by the end of fall semester prior to making application
  - c. Grade Point Average (GPA) in related courses
  - d. County of residency
  - e. County of employment
  - f. Work experience in intermediate, skilled or acute care
  - g. Graduates of Gaston College LPN program
9. The selection of applicants into the program is based on the above criteria using a point system developed by the nursing faculty.



10. The LPN to RN Alternate Schedule Option is an evening/weekend program that includes on-campus sessions, clinical at acute care facilities and online classes. Students must have a computer with email and Internet capabilities to participate in this option.
11. Criminal Background Checks and Drug Screening: In order to comply with current Student Affiliation Agreements students accepted into the Associate Degree Nursing Program will be required to submit a Criminal Background Check and Drug Screening according to Gaston College procedures prior to placement in a clinical facility. The facility reserves the right to deny the student access to the facility. If the student is denied access, the student will not be allowed to enroll in the program. Completion of clinical experiences is required for the satisfactory completion of the program. More information will be provided upon conditional acceptance into the program.

A completed North Carolina Community College Student Medical Form documenting satisfactory emotional and physical health and a criminal background check is required before entrance into the program by date to be announced by the Coordinator of Evening Nursing Programs.

The required related courses will be offered on either the Gaston College Dallas campus or the Gaston College Lincoln campus.

#### Clinical Sites

Clinical sites for the LPN to RN Alternate Schedule Option are:

- Gaston Memorial Hospital, Gastonia, NC
- Lincoln Medical Center, Lincolnton, NC
- Kings Mountain Hospital, Kings Mountain, NC
- Cleveland Regional Medical Center, Shelby, NC
- Frye Regional Medical Center, Hickory, NC
- Catawba Valley Medical Center, Hickory, NC
- Broughton Hospital, Morganton, NC
- Grace Hospital, Morganton, NC
- UNC Hospital Burn Center, Chapel Hill, NC

Other clinical sites may be added as needed.

Students are responsible for their own transportation to and from all clinical, laboratory and class activities. Clinical experiences will be scheduled afternoon, evenings and/or weekends.

# Associate Degree Nursing

LPN to RN Alternate Schedule Option  
Evening/Weekend

**Pre-requisite Courses:**

- ENG 111 - Expository Writing
- PSY 150 - General Psychology
- PSY 241 - Developmental Psychology
- BIO 168 - Anatomy & Physiology I
- BIO 169 Anatomy & Physiology II

Title			Class	Lab	Clinical	Work	Credits
<b><u>First Semester</u></b>							
NUR	187	Transition Practicum	0	0	6	0	2
NUR	189	Nursing Transition	1	3	0	0	2
<u>BIO</u>	<u>275</u>	<u>Microbiology</u>	3	3	0	0	4
ENG	112	Argument-Based Research	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
<b>Semester Total</b>			7	6	6	0	11

**Second Semester**

NUR	222	LPN to AD Nursing I	6	0	6	0	8
<u>SOC</u>	<u>210</u>	<u>Introduction to Sociology</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
		<b>Semester Total</b>	9	0	6	0	11

**Third Semester**

NUR	224	LPN to AD Nursing II	6	0	6	0	8
NUR	233	Leadership in Nursing	2	0	0	0	2
		<u>Humanities Elective (Literature, Foreign Language, Religion, Philosophy, Art, OR Music)</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
		<b>Semester Total</b>	11	0	6	0	13

**Total Credit Hours required for Associate Degree In Nursing** 75

Total Credit Hours of non-nursing required courses	30
Total Credit Hours of nursing required courses	22
Total Credit Hours earned after successful completion of Nursing 187 & 189	23
Total Credit Hours required for Associate Degree In Nursing	75

Non-nursing required courses are underlined.

Students are strongly recommended to complete all non-nursing required courses prior to entrance into the program.

Non-nursing required courses may need to be taken during the day but the required nursing courses will be offered in the evenings and on weekends.



## Nursing (Registered Nursing)

Associate in Applied Science Degree  
A45120

The Associate Degree nursing curriculum provides individuals with the knowledge and skills necessary to provide nursing care to clients and groups of clients throughout the lifespan in a variety of settings.

Courses will include content related to the nurse's role as a provider of nursing care, as a manager of care, as a member of the discipline of nursing, and as a member of the interdisciplinary team.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN) which is required for practice as a Registered Nurse. Employment opportunities include hospitals, long term care facilities, clinics, physician's offices, industry, and community agencies.

### ADMISSION INFORMATION

Students applying for admission to the Gaston College Nursing program MUST meet the following requirements for GENERAL ADMISSION to the college:

1. Complete general admission application.
2. Schedule and take the placement test. The placement test may not be required of any person who has scored 500 on the verbal section and 520 on the math section of the SAT or who has a composite score of 21 or higher on the English portion of the ACT will be exempted from the Writing and Reading portions of the college placement test. Students who score a 21 or higher on the Mathematics portion of the ACT will be exempt from the Math portion of the college placement test.
3. Submit official transcript from home school, international correspondence school, or high school with graduation date or GED scores (minimum score of 225 and no sub score less than 35).
4. Submit official college transcript(s), when applicable.
5. Applicants from countries whose language is not English must demonstrate proficiency in the English language by scoring no less than 540 (207 on the computer) on the Test of English as a Foreign Language (TOEFL).

### ADDITIONAL REQUIREMENTS TO BE ELIGIBLE TO SUBMIT AN APPLICATION TO THE ASSOCIATE DEGREE NURSING PROGRAM:

1. Must submit a minimum composite score of 21 on the American College Test (ACT) or 1000 on the Scholastic Aptitude Test (SAT). The highest Verbal and Math score will be accepted. Must be taken within 5 years from the date of application.
2. Must have a minimum grade of "C" in all courses listed as part of the nursing major (ADN program).
3. Must have completed the required biology courses within 10 years form the date of application to the nursing program.
4. Must present a current certificate as a CNA 1 from a North Carolina Community College Curriculum program OR a North Carolina Health Occupations Class AND be currently listed with the North Carolina Division of Facility Services.

5. United States resident applicants whose primary language is not English will be required to demonstrate proficiency in the English language. This may include scoring no less than 540 (207 on the computer) on the TOEFL. The Department Chairperson of the Associate Degree Nursing Program, in consultation with the Dean of Health Education, will determine the means of demonstrating proficiency on an individual basis.
6. Must submit a current Adult and Infant CPR certification prior to entrance into the program.
7. Criminal Background Checks and Drug Screening: In order to comply with current Student Affiliation Agreements students accepted into the Associate Degree Nursing Program will be required to submit a Criminal Background Check and Drug Screening according to Gaston College procedures prior to placement in a clinical facility. The facility reserves the right to deny the student access to the facility. If the student is denied access, the student will not be allowed to enroll in the program. Completion of clinical experiences is required for the satisfactory completion of the program. More information will be provided upon conditional acceptance into the program.

**The following criteria will be utilized by the Admissions Committee in the selection process of recommending applicants to the Nursing Faculty for admission to the program:**

1. ACT/SAT score.
2. The number of required courses completed by the end of the Fall semester prior to making application.
3. Grade Point Average (GPA) in required courses.

The selection of applicants into the Program is based on the above criteria. The final selection of applicants into the program is made by the nursing faculty upon recommendation of the Admissions Committee.

A completed North Carolina Community College Student Medical Form documenting satisfactory emotional and physical health is required before entrance into the program by date to be announced by the Nursing Department Chairperson.

The required related courses will be offered on either the Gaston College Dallas campus or the Gaston College Lincoln campus.

## CLINICAL SITES

Clinical sites for the Associate Degree Nursing Programs are:

- Gaston Memorial Hospital, Gastonia, NC
  - Lincoln Medical Center, Lincolnton, NC
  - Kings Mountain Hospital, Kings Mountain, NC
  - Charlotte Institute of Rehabilitation, Charlotte, NC
  - Carolinas Medical Center, Charlotte, NC
  - Cleveland Regional Medical Center, Shelby, NC
  - Frye Regional Medical Center, Hickory, NC
  - Catawba Valley Medical Center, Hickory, NC
  - Broughton Hospital, Morganton, NC
  - Grace Hospital, Morganton, NC
  - UNC Hospital Burn Center, Chapel Hill, NC
- (two day clinical experiences during the fifth semester)



Students are responsible for their own transportation to and from all clinical, laboratory, and class activities. Clinical experiences may be scheduled mornings, afternoons, evenings, or weekends at various clinical sites.

## Associate Degree Nursing

A45120

Title			Class	Lab	Clinical	Work	Credits
<b>First Semester</b>							
BIO	168	Anatomy & Physiology I	3	3	0	0	4
ENG	111	Expository Writing	3	0	0	0	3
PSY	150	General Psychology	3	0	0	0	3
NUR	115	Fundamentals of Nursing	2	3	6	0	5
NUR	133	Nursing Assessment	<u>2</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
Semester Total			13	9	6	0	18
<b>Second Semester</b>							
BIO	169	Anatomy & Physiology II	3	3	0	0	4
PSY	281	Abnormal Psychology	3	0	0	0	3
NUR	135	Adult Nursing I	<u>5</u>	<u>3</u>	<u>9</u>	<u>0</u>	<u>9</u>
Semester Total			11	6	9	0	16
<b>Third Semester</b>							
BIO	275	Microbiology	3	3	0	0	4
ENG	112	Argument-Based Research	3	0	0	0	3
NUR	185	Mental Health Nursing	3	0	6	0	5
NUR	188A	Nursing in the Community	<u>.5</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>1.5</u>
Semester Total			9.5	3	9	0	13.5
<b>Fourth Semester</b>							
SOC	210	Introduction to Sociology	3	0	0	0	3
NUR	125	Maternal Child Health Nursing	5	3	6	0	8
NUR	188B	Nursing in the Community	<u>.5</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>1.5</u>
Semester Total			8.5	3	9	0	12.5
<b>Fifth Semester</b>							
NUR	235	Adult Nursing II	4	3	15	0	10
NUR	255	Professional Issues	3	0	0	0	3
<u>Humanities Elective (Literature, Foreign Language, Religion, Philosophy, Art, OR Music)</u>			3	0	0	0	3
Semester Total			10	3	15	0	16
<b>Total Credit Hours for Graduation</b>							<b>76</b>

Non-nursing required courses are underlined.

Office Systems Technology

Associate of Applied Science Degree  
(A25360)

The Office Systems Technology curriculum prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic, computerized workplace.

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics.

Graduates should qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management. Emphasis is placed on non-technical as well as technical skills.

Gaston College is a candidate for accreditation by the Association of Collegiate Business Schools and Programs.

Title			Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>							
<b>Fall</b>							
BUS	121	Business Math	2	2	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
ENG	111	Expository Writing	3	0	0	0	3
OST	131	Keyboarding	1	2	0	0	2
		Natural Science/MAT 115 or Higher Elective					<u>3</u> 14
<b>Spring</b>							
COM	120	Interpersonal Communications	3	0	0	0	3
OST	132	Keyboard Skill Building	1	2	0	0	2
OST	136	Word Processing	1	2	0	0	2
OST	164	Text Editing Applications	3	0	0	0	3
OST	184	Records Management	1	2	0	0	2
		Elective					<u>3</u> 15
<b>Summer</b>							
ENG	114	Prof. Research & Reporting or					
ENG	112	Argument Based Research	3	0	0	0	3
		Social Science Elective	3	0	0	0	3
		Humanities Elective	3	0	0	0	<u>3</u> 9



SECOND YEAR

Fall

ACC	115	College Accounting	3	2	0	0	4
BUS	260	Business Communications	3	0	0	0	3
OST	134	Text Entry and Formatting	2	2	0	0	3
OST	236	Adv. Word/Information Proc.	2	2	0	0	3
OST	284	Emerging Technologies	1	2	0	0	<u>2</u>
							15

Spring

OST	135	Adv. Text Entry and Formatting	3	2	0	0	4
OST	223	Machine Transcription I	1	2	0	0	2
OST	233	Office Publications Design	2	2	0	0	3
OST	286	Professional Development	3	0	0	0	3
OST	289	Office Systems Management	2	2	0	0	<u>3</u>
							15

Total Hours Required for Graduation:

68

Electives (Select 3 credit hours)

BUS	110	Introduction to Business	3	0	0	0	3
BUS	115	Business Law I	3	0	0	0	3
BUS	125	Personal Finance	3	0	0	0	3
CIS	120	Spreadsheet I	2	2	0	0	3
CIS	162	Multimedia Pres. Software	2	2	0	0	3
CIS	172	Intro to the Internet	2	3	0	0	3
COE	111	Co-op Work Experience I	0	0	0	10	1
COE	112	Co-op Work Experience I	0	0	0	20	2
COE	121	Co-op Work Experience II	0	0	0	10	1
COE	122	Co-op Work Experience II	0	0	0	20	2
COE	131	Co-op Work Experience III	0	0	0	10	1
OST	122	Office Computations	1	2	0	0	2
OST	137	Office Software Applications	1	2	0	0	2

Course credits (OST and CIS) earned over five years ago will not apply toward the Associate of Applied Science degree in Office Systems Technology.

Credits toward the AAS may be given to persons who have earned the Certified Professional Secretary designation. For further information, persons holding this certification should contact the Chairperson of Office Systems Technology.

# Office Systems Technology - Legal

Associate in Applied Science Degree  
(A2536A)

Legal is a concentration under the curriculum title of Office Systems Technology. This curriculum prepares individuals for entry-level positions in legal or government-related offices and provides professional development for the currently employed.

Course work includes terminology, operational procedures, preparation and transcription of documents, computer software, and court-related functions, as they relate to the legal office profession. Emphasis is placed on the development of accuracy, organizational skills, discretion, and professionalism.

Graduates should qualify for employment in corporate legal departments; private practices, including real estate and estate planning; and city, state, and federal government offices. With appropriate work experience, graduates may apply for certification as a Professional Legal Secretary (PLS).

Gaston College is a candidate for accreditation by the Association of Collegiate Business Schools and Programs.

	Title	Class	Lab	Clinical	Work	Credits
<b>FIRST YEAR</b>						
<b>Fall</b>						
CIS	110 Introduction to Computers	2	2	0	0	3
ENG	111 Expository Writing	3	0	0	0	3
OST	131 Keyboarding	1	2	0	0	2
OST	155 Legal Terminology	3	0	0	0	3
	Natural Science/MAT 115 or Higher Elective					<u>3</u>
						14
<b>Spring</b>						
COM	120 Interpersonal Communications	3	0	0	0	3
OST	132 Keyboard Skill Building	1	2	0	0	2
OST	136 Word Processing	1	2	0	0	2
OST	164 Text Editing Applications	3	0	0	0	3
	Elective					3
	Humanities Elective	3	0	0	0	<u>3</u>
						16
<b>Summer</b>						
ENG	114 Prof. Research & Reporting or					
ENG	112 Argument Based Research	3	0	0	0	3
OST	236 Adv. Word/Information Proc.	2	2	0	0	3
	Social Science Elective	3	0	0	0	<u>3</u>
						9



SECOND YEAR

Fall

BUS	115	Business Law I	3	0	0	0	3
BUS	260	Business Communications	3	0	0	0	3
OST	134	Text Entry and Formatting	2	2	0	0	3
OST	184	Records Management	1	2	0	0	2
OST	284	Emerging Technologies	1	2	0	0	2
							13

Spring

OST	135	Advanced Text Entry & Formatting	3	2	0	0	4
OST	156	Legal Office Procedures	2	2	0	0	3
OST	252	Legal Transcription I	2	2	0	0	3
OST	286	Professional Development	3	0	0	0	3
OST	289	Office Systems Management	2	2	0	0	3
							16

Total Hours Required for Graduation:

68

Electives (Select 3 credit hours)

ACC	115	College Accounting	3	2	0	0	4
BUS	121	Business Math	2	2	0	0	3
CIS	120	Spreadsheet I	2	2	0	0	3
CIS	172	Intro to the Internet	2	3	0	0	3
COE	111	Co-op Work Experience I	0	0	0	10	1
COE	112	Co-op Work Experience I	0	0	0	20	2
COE	121	Co-op Work Experience II	0	0	0	10	1
COE	122	Co-op Work Experience II	0	0	0	20	2
COE	131	Co-op Work Experience	0	0	0	10	1
LEX	120	Legal Research/Writing I	2	2	0	0	3
LEX	270	Law Office Mgt/Tech.	1	2	0	0	2
OST	122	Office Computations	1	2	0	0	2
OST	137	Office Software Applications	1	2	0	0	2
OST	233	Office Publications Design	2	2	0	0	3

Course credits (OST and CIS) earned over five years ago will not apply toward the Associate of Applied Science degree in Office Systems Technology-Legal.

Credits toward the AAS may be given to persons who have earned the Certified Professional Secretary designation. For further information, persons holding this certification should contact the Chairperson of Office Systems Technology.

# Paralegal Technology

Associate in Applied Science Degree  
(A25380)

The Paralegal Technology curriculum prepares individuals to work under the supervision of attorneys by performing routine legal tasks and assisting with substantive legal work. A paralegal/legal assistant may not practice law, give legal advice, or represent clients in a court of law.

Course work includes substantive and procedural legal knowledge in the areas of civil litigation, legal research and writing, real estate, family law, wills, estates, trusts, and commercial law. Required courses also include subjects such as English, mathematics, and computer utilization.

Graduates are trained to assist attorneys in probate work, investigations, public records search, drafting and filing legal documents, research, and office management. Employment opportunities are available in private law firms, governmental agencies, banks, insurance agencies, and other business organizations.

The North Carolina State Bar Board of Paralegal Certification has designated the Paralegal Program as a qualified paralegal studies program under the State Bar's Plan for Certification of Paralegals.

Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>					
<b>ENGLISH (3 SHC)</b>					
ENG 111 Expository Writing	3	0	0	0	3
<b>Select 3.0 hours from the following courses:</b>					
<i>Students will not receive credit for both ENG 112 and ENG 114.</i>					
ENG 112 Argument-Based Research	3	0	0	0	3
ENG 114 Prof. Research & Report	3	0	0	0	3
<b>Select one of the following sequences:</b>					
MAT 115 Mathematical Models	2	2	0	0	3
Or					
MAT 140 Survey of Mathematics	3	0	0	0	3
MAT 140ASurvey of Math. Lab	0	2	0	0	1
Or					
MAT 151 Statistics I	3	0	0	0	3
MAT 151A Statistics I Lab	0	2	0	0	1
Or					
MAT 161 College Algebra	3	0	0	0	3
MAT 161ACollege Algebra Lab	0	2	0	0	1
<b>Select 6.0 hours from the Social/Behavioral Sciences:</b>					
ANT 210 Anthropology	3	0	0	0	3
HIS 111 World Civilization I	3	0	0	0	3
HIS 131 American History I	3	0	0	0	3
POL 110 Intro to Political Science	3	0	0	0	3
POL 120 American Government	3	0	0	0	3
POL 130 State & Local Government	3	0	0	0	3
PSY 150 General Psychology	3	0	0	0	3
SOC 210 Introduction to Sociology	3	0	0	0	3
GEO 111 World Reg. Geography	3	0	0	0	3
<b>Select 3.0 hours from the Humanities/Fine Arts:</b>					
ART 111 Art Appreciation	3	0	0	0	3
MUS 110 Music Appreciation	3	0	0	0	3



# ASSOCIATE OF APPLIED SCIENCE DEGREES

ENG	131	Introduction to Literature	3	0	0	0	3
ENG	231	American Literature I	3	0	0	0	3
PHI	210	History of Philosophy	3	0	0	0	3
REL	110	World Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Testament	3	0	0	0	3
REL	212	Intro to New Testament	3	0	0	0	3
HUM	115	Critical Thinking	3	0	0	0	3

## MAJOR COURSES

LEX	110	Intro to Paralegal Study	2	0	0	0	2
LEX	120	Legal Research/Writing I	2	2	0	0	3
LEX	130	Civil Injuries	3	0	0	0	3
LEX	140	Civil Litigation I	3	0	0	0	3
LEX	150	Commercial Law I	2	2	0	0	3
LEX	210	Real Property I	3	0	0	0	3
LEX	240	Family Law	3	0	0	0	3
LEX	250	Wills, Estates, & Trusts	2	2	0	0	3

## Select 18 hours from the following courses:

LEX	121	Legal Research/Writing II	2	2	0	0	3
LEX	141	Civil Litigation II	2	2	0	0	3
LEX	160	Criminal Law & Procedure	2	2	0	0	3
LEX	170	Administrative Law	2	0	0	0	2
LEX	198	Seminar in Legal Issues	3	0	0	0	3
LEX	211	Real Property II	1	4	0	0	3
LEX	220	Corporate Law	2	0	0	0	2
LEX	260	Bankruptcy & Collections	2	0	0	0	2
LEX	270	Law Off. Mgt/Technology	1	2	0	0	2
LEX	280	Ethics & Professionalism	2	0	0	0	2
LEX	287	CLA Review Seminar	2	0	0	0	2
LEX	288	Elder Law	3	0	0	0	3

## ELECTIVES

Select 9.0 hours from the following courses, one of which must be a computer course.

(In no event may a student take more than 6 hours of COE.)

CIS	110	Introduction to Computers	2	2	0	0	3
CIS	111	Basic PC Literacy	1	2	0	0	2
ACC	120	Prin. of Accounting I	3	2	0	0	4
BUS	115	Business Law I	3	0	0	0	3
CJC	111	Intro. to Criminal Justice	3	0	0	0	3
CJC	231	Constitutional Law	3	0	0	0	3
COE	111	Co-op Work Experience I	0	0	0	10	1
COE	112	Co-op Work Experience I	0	0	0	20	2
COE	113	Co-op Work Experience I	0	0	0	30	3
COE	114	Co-op Work Experience I	0	0	0	40	4
COE	121	Co-op Work Experience II	0	0	0	10	1
COE	122	Co-op Work Experience II	0	0	0	20	2
COE	123	Co-op Work Experience II	0	0	0	30	3
COE	124	Co-op Work Experience II	0	0	0	40	4
COE	131	Co-op Work Experience III	0	0	0	10	1
COE	132	Co-op Work Experience III	0	0	0	20	2
COE	133	Co-op Work Experience III	0	0	0	30	3
COE	134	Co-op Work Experience III	0	0	0	40	4
COE	211	Co-op Work Experience IV	0	0	0	10	1
COE	212	Co-op Work Experience IV	0	0	0	20	2
COE	213	Co-op Work Experience IV	0	0	0	30	3
COE	214	Co-op Work Experience IV	0	0	0	40	4
OST	131	Keyboarding	1	2	0	0	2
OST	136	Word Processing	1	2	0	0	2

Total Semester Hours Credit: 68-69

# Therapeutic Massage

Associate in Applied Science  
(A45750)

The Massage Therapy curriculum prepares graduates to work in direct client care settings to provide manipulation, methodical pressure, friction and kneading of the body for maintaining wellness or treating alterations in wellness throughout the lifespan.

Course work includes normal human anatomy and physiology, therapeutic massage, ethical/legal issues, business practices, nutrition, and psychology.

Employment opportunities may be found in hospitals, rehabilitation centers, health departments, home health, medical offices, nursing homes, spas, health and sports clubs, and private practice. Graduates may be eligible to take the National Certification for Therapeutic Massage and Bodywork.

The Therapeutic Massage curriculum offers two options – a degree and a diploma program. Completion of the degree program is highly recommended as it prepares the graduate to be a practitioner with a broader knowledge base in the practice of Therapeutic Massage.

## ADMISSION INFORMATION

Students applying for admission to the Gaston College Therapeutic Massage program MUST meet the following requirements for General Admission to the college:

1. Complete general admission application.
2. Completion of ASSET/COMPASS.
  - a. Individuals who have earned a “C” or better in both college-level Math and English courses from a regionally accredited institution shall have the test waived.
  - b. The ASSET/COMPASS test may also be waived of any person who has scored a 500 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT.
3. Submit official transcript of high school grades with graduation date OR GED scores.
4. Submit official college transcript(s), when applicable.
5. Applicants from countries whose language is not English must demonstrate proficiency in the English language by scoring no less than 540 on the Test of English as a Foreign Language (TOEFL).

## ADDITIONAL REQUIREMENTS TO BE ELIGIBLE TO SUBMIT AN APPLICATION TO THE THERAPEUTIC MASSAGE PROGRAM:

1. **ASSET/COMPASS test and completion of any identified developmental courses.**
2. **Must have an overall grade point average of 2.0 or better in required college courses.**
3. **Must have grades of “C” or better in all related courses.**
4. **Must have completed the required Biology courses within 5 years from the date of application to the program.**



The following criteria will be utilized by the Admissions Committee in the selection process of recommending applicants for admission to the program:

1. The number of related courses completed by end of the fall semester prior to making application.
2. Grade Point Average (GPA) in related courses.

**The final selection of applicants into the program is made by the Department Chairman in consultation with the Dean of Health Education. Required before entrance into the program by date to be announced by the Therapeutic Massage Chair:**

1. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) 2004 Management of Human Resources criteria requires students and volunteers as well as employees to have a criminal background check (CBC) prior to being allowed access to a facility as student, volunteer or employee. Agencies may also elect to require drug screening, social security trace, and sex offender registry checks prior to allowing access. These requirements may affect students enrolled in programs of the Health Division of Gaston College.
2. In order to comply with current Student Affiliation Agreements students accepted for the Therapeutic Massage Program will be required to submit a **Criminal Background Check according to Gaston College (GC) procedure** prior to placement in a clinical facility. If the student is denied access, the student will not be allowed to enroll in the program. Completion of clinical experiences is required for the satisfactory completion of the program. Further information will be provided with the acceptance letter sent to prospective students. Other types of background checks need not be submitted.
3. A completed health form documenting satisfactory emotional and physical health.
4. A current CPR certification.

Therapeutic Massage  
Associate in Applied Science  
(A45750)

Title	Class	Lab	Clinical	Work	Credits
<b>First Semester</b>					
BIO 163 Basic Anatomy and Physiology	4	2	0	0	5
MED 121 Medical Terminology I	3	0	0	0	3
PSY 110 Life Span Development	3	0	0	0	3
MTH 110 Fundamentals of Massage	6	12	0	0	10
	16	14	0	0	21
<b>Second Semester</b>					
ENG 111 Expository Writing	3	0	0	0	3
BIO 271 Pathophysiology	3	0	0	0	3
PSY 118 Interpersonal Psychology	3	0	0	0	3
MTH 120 Therapeutic Massage Applications	6	12	0	0	10
	15	12	0	0	19

ASSOCIATE OF APPLIED SCIENCE DEGREES

<b>Third Semester</b>							
MTH	125	Ethics of Massage	2	0	0	0	2
<u>MAT</u>	<u>110+</u>		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
			5	0	0	0	5
<b>Fourth Semester</b>							
<u>BIO</u>	<u>155</u>	<u>Nutrition</u>	3	0	0	0	3
MTH	210	Advanced Skills of Massage	4	12	0	0	8
<u>ENG</u>	<u>112</u>	<u>Argument-Based Research</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
			10	12	0	0	14
<b>Fifth Semester</b>							
<u>BUS</u>	<u>230</u>	<u>Small Business Management</u>	3	0	0	0	3
MTH	220	Outcome-based Massage	4	9	0	0	7
COE	111	Co-op Work Experience I	0	0	0	10	1
		<u>Humanities Elective</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
			10	9	0	10	14

Related Courses are underlined

**Total Required Minimum Semester Hours Credit: 72**

50 hours of independent therapeutic massage practicum.



# Veterinary Medical Technology

Associate in Applied Science Degree  
(A45780)

The Veterinary Technology Curriculum prepares the graduate to assist the veterinarian in small and large animal practices by obtaining and recording information about cases; preparing animals, instruments, equipment and medication for examination and surgery; collecting specimens; performing laboratory procedures; applying bandages and splints; and providing proper husbandry for animals and their environment. Students also learn skills in office management, record keeping and communications.

Course work includes instruction in veterinary anatomy, nutrition, parasitology, pathology, physiology, radiology, terminology, zoology, office practices, laboratory techniques, dentistry and small and large animal clinical practices. Students also take courses in English, humanities, chemistry, and computer technology. Graduates are eligible to write the National Veterinary Technician Exam and the State Licensing Examination given by the North Carolina Veterinary Medical Board. Graduates may work in private veterinarians' offices, diagnostic and research laboratories, veterinary supply businesses, and other areas dealing with animal care.

## ADMISSION REQUIREMENTS

Applicants to the Veterinary Medical Technology Program must meet the following criteria for admission into the program:

1. Must be a high school or GED graduate.
2. Must be at least 18 years old.
3. Must meet all requirements for general admission to Gaston College (all official transcripts must be on file in the admissions office). Please call Gaston College Admissions 704-922-6216 to obtain admission requirements
4. COMPASS test and completion of any identified developmental courses are required prior to acceptance into the Veterinary Medical Technology Program. Please call Gaston College Admission at 704-922-6216 to schedule the exam.

The following COMPASS scores are required for admission into the Vet Tech Program:  
Writing = 60 Reading= 80 Pre- Algebra= 47

5. Must attain a minimum composite score of 18 on the ACT or an 870 on the SAT examination. Possible exemptions for COMPASS placement test: If an applicant receives a score greater than or equal to 21 on the English portion of the ACT, the reading and writing portion of the admissions exam may be waived. If a score of 21 or greater on the mathematics portion of the ACT, the mathematics portion of the admissions exam may be waived. On the SAT, Writing and reading portions of the admissions test may be waived if receive a verbal score 500 and the mathematics portion of the admissions test may be waived if receive a math score 520 (Exam scores must be current within 5 years prior to entry). Any applicant having completed a college degree (Associate's or higher) may waive this requirement upon presenting proof (official transcript) of their degree.

6. Complete application form for Veterinary Medical Technology Program. (These forms may be obtained by calling (704) 922-6377 the Vet Tech Department extension. Applications will be accepted beginning in January of each year.
7. College level courses will be considered for transfer credit upon receipt of an applicant's transcript. Medical Terminology and Chemistry courses must be current within 10 years to be considered for transfer credit. Computer courses must be current within 5 years to be considered for transfer credit.
8. Applicants whose primary spoken language is not English will be required to demonstrate proficiency in the English language via the Test of English as a Foreign Language (TOEFL). (See page 20 of the Gaston College Catalog).
9. The following are special health requirements that are to be met by all students accepted into the veterinary technology program:
  - a. Upon admission physical and dental exam within the last six (6) months is due on the date stated in the applicant's acceptance letter.
  - b. Prospective students with known or suspected communicable or other serious illnesses are ethically and legally obligated to evaluate their health status in light of student safety. In addition, a physician's statement documenting that the disease state is cured or adequately controlled must be provided.
  - c. If psychiatric treatment has been utilized, a statement from the psychiatrist, relative to suitability for veterinary technology may be requested.
  - d. Proof of a tetanus injection within the last ten (10) years.
  - e. Proof of a tuberculin skin test (PPD) within the last year.
  - f. Rabies vaccination (required) must be completed by the end of Fall Semester of the first year. If already vaccinated, proof of adequate blood titer (within previous two (2) years) must be provided. If a student elects not to receive rabies immunization, a waiver must be signed.

Students are responsible for obtaining their own health insurance policy and/or paying for any medical expenses incurred as a result of illness or injury sustained during class, lab, or clinical experiences (i.e. strained back, needle stick). Neither Gaston College nor the affiliating institutions/agencies are responsible for medical expenses incurred as part of the educational process.
10. Applicants will be notified by mail of their admission status by the Veterinary Technology Department Chairman. Those students who are not admitted to the Vet Tech Program may reapply at a later date. Students reapplying for admission must meet the admission requirements current at the time of their most recent application.

*All necessary application forms may be obtained by calling (704) 922-6377*  
*Enrollment in the Vet Tech Program is limited to 40 students each Fall Semester.*



Veterinary Medical Technology Program

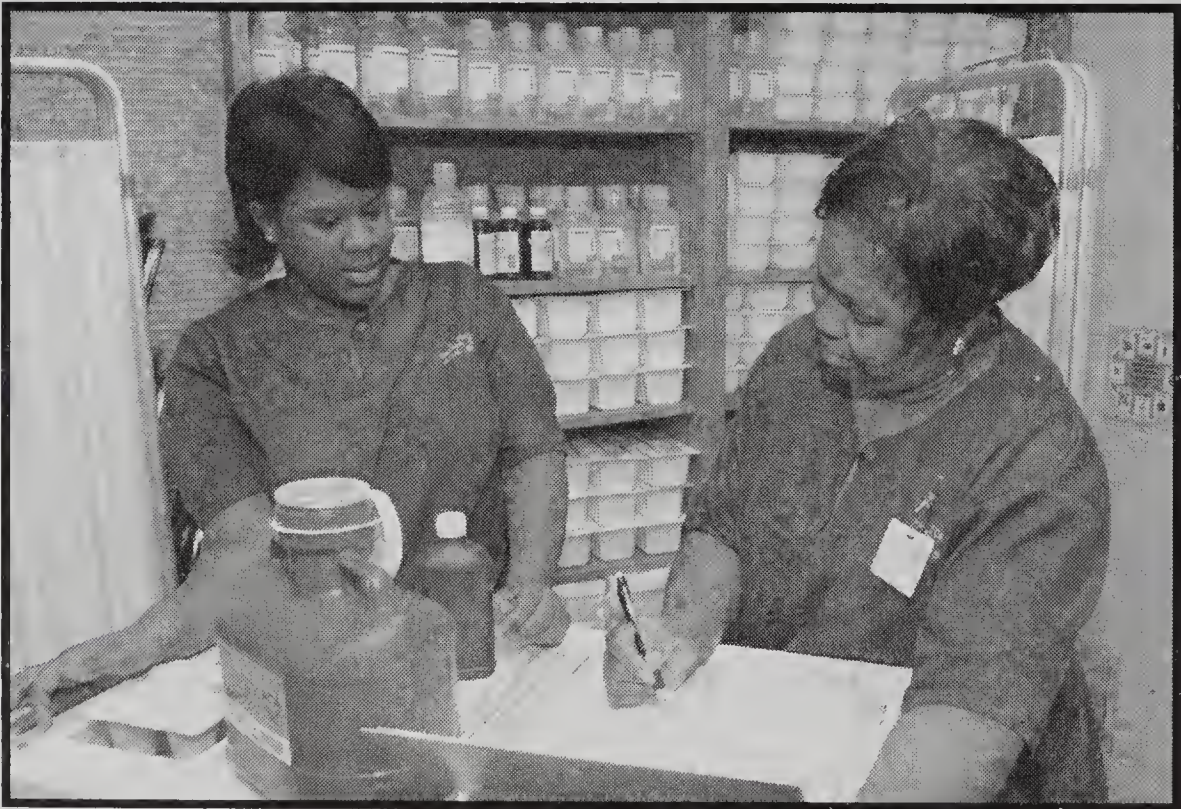
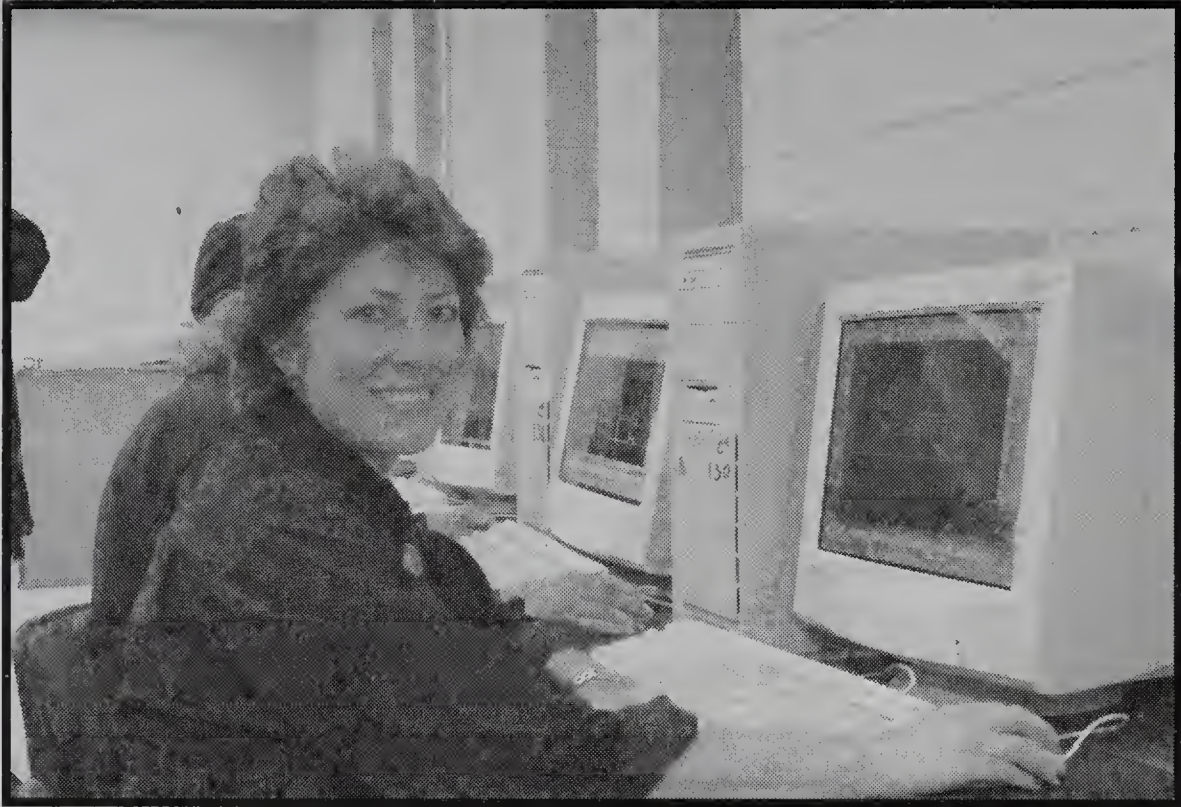
Associate in Applied Science Degree  
(A45780)

Title			Class	Lab	Clinical	Work	Credits
FALL SEMESTER, First Year							
ENG	111	Expository Writing	3	0	0	0	3
CIS	110	Intro to Computers	2	2	0	0	3
VET	110	Animal Breeds & Husbandry	2	2	0	0	3
MED	121	Medical Terminology I	3	0	0	0	3
VET	122	Veterinary Zoology	3	3	0	0	4
VET	137	Vet Office Practices	<u>1</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>2</u>
Total			14	9	0	0	18
SPRING SEMESTER, First Year							
CHM	130	General, Organic & Biochemistry	3	0	0	0	3
CHM	130A	General, Organic & Biochem Lab	0	2	0	0	1
VET	131	Vet Lab Techniques I	2	3	0	0	3
VET	133	Vet Clinical Practice I	2	3	0	0	3
VET	120	Vet Anatomy & Physiology	3	3	0	0	4
VET	123	Veterinary Parasitology	<u>2</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
Total			12	14	0	0	17
SUMMER SEMESTER First Year							
VET	215	Veterinary Pharmacology	5	0	0	0	3
VET	211	Vet Lab Techniques II	2	3	0	0	3
VET	237	Animal Nutrition	3	0	0	0	3
VET	125	Veterinary Diseases I	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>
Total			12	3	0	0	11
FALL SEMESTER Second Year							
ENG	114	Prof. Research & Reporting	3	0	0	0	3
VET	212	Vet Lab Tech III	2	3	0	0	3
VET	213	Vet Clinical Practices II	1	9	0	0	4
VET	126	Vet Disease II	1	3	0	0	2
VET	217	Large Animal Clinical Prac.	<u>2</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
Total			9	18	0	0	15
SPRING SEMESTER, Second Year							
HUM	115	Critical Thinking	3	0	0	0	3
SOC	210	Intro to Sociology	3	0	0	0	3
VET	214	Vet Clinical Practices III	1	9	0	0	4
COE	112	Co-op Work Experience I	<u>0</u>	<u>0</u>	<u>0</u>	<u>20</u>	<u>2</u>
Total			7	9	0	20	12
Total Credit Hours for Graduation:							73

ASSOCIATE OF APPLIED SCIENCE DEGREES



# ASSOCIATE OF APPLIED SCIENCE DEGREES







# Gaston College

Opportunities For Life

2006-2008 Gaston College Academic Catalog

## X. Diploma Programs

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## DIPLOMA PROGRAMS

# Accounting

Diploma  
(D25100)

The Accounting diploma is designed for individuals entering, upgrading, or retraining in the accounting profession. Special emphasis is placed upon the use of technology resources in assembling, analyzing, processing, and communicating information about financial operations.

In addition to course work in accounting principles, income taxes, payroll accounting, and accounting spreadsheet applications, students will study business law and computers. Related skills are developed through the study of expository writing and professional research and reporting.

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

## DIPLOMA PROGRAMS

	Title	Class	Lab	Clinical	Work	Credits
<b>FALL</b>						
ACC 120	Principles of Financial Accounting	3	2	0	0	4
BUS 115	Business Law I	3	0	0	0	3
CIS 110	Introduction to Computers	2	2	0	0	3
ECO 151	Survey of Economics	3	0	0	0	3
ENG 111	Expository Writing	3	0	0	0	<u>3</u>
						16
<b>SPRING</b>						
ACC 121	Principles of Managerial Accounting	3	2	0	0	4
ACC 129	Individual Income Taxes	2	2	0	0	3
ACC 149	Intro to Accounting Spreadsheets	1	2	0	0	2
ENG 114	Prof Research & Reporting	3	0	0	0	3
	Elective – Any <b>BUS</b> Prefix Course	3	0	0	0	<u>3</u>
						15
<b>SUMMER</b>						
ACC 122	Principles of Financial Accounting II	3	0	0	0	3
ACC 140	Payroll Accounting	1	2	0	0	2
	Elective – Any <b>BUS</b> Prefix Course	3	0	0	0	<u>3</u>
						8

**Total Hours Required for Graduation:** **39**

The courses taken in this diploma program may be applied toward the Associate of Applied Science degree in Accounting.



# Air Conditioning, Heating and Refrigeration Technology

Diploma  
(D35100)

The Air Conditioning, Heating and Refrigeration Technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

Topics include mechanical refrigeration heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools, and instruments.

Diploma graduates should be able to assist in the start up, preventive maintenance, service and repair, and/or installation of residential and light commercial systems.

Title			Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
MAT	101	Applied Mathematics I	2	2	0	0	3
ENG	101	Applied Communication I	3	0	0	0	3
<b>Major Courses</b>							
AHR	110	Intro to Refrigeration	2	6	0	0	5
AHR	112	Heating Technology	2	4	0	0	4
AHR	113	Comfort Cooling	2	4	0	0	4
AHR	114	Heat Pump Technology	2	4	0	0	4
BPR	130	Blueprint Reading for Construction	1	2	0	0	2
ELC	111	Intro to Electricity	2	2	0	0	3
AHR	130	HVAC Controls	2	2	0	0	3
AHR	133	HVAC Servicing	2	6	0	0	4
AHR	160	Refrigerant Certification	1	0	0	0	1
CIS	111	Basic PC Literacy	1	2	0	0	2
<b>*CHOOSE 2 SHC FROM THE FOLLOWING COURSES</b>							
AHR	210	Residential Building Code	1	2	0	0	2
AHR	151	HVAC Duct Systems I	1	3	0	0	2
AHR	140	All-Weather Systems	1	3	0	0	2
AHR	211	Residential System Design	2	2	0	0	3
AHR	215	Commercial HVAC Controls	1	3	0	0	2
COE	111	Co-Op Work Experience	0	0	0	10	1
*COE	112	Co-Op Work Experience	0	0	0	20	2
COE	121	Co-Op Work Experience	0	0	0	10	1
ISC	112	Industrial Safety	2	0	0	0	2
<b>Total Semester Hour Credit</b>							<b>43</b>

DIPLOMA PROGRAMS

# Automotive Systems Technology

Diploma  
(D60160)

The Automotive Systems Technology curriculum prepares individuals for employment as Automotive Service Technicians. It provides an introduction to automotive careers and increase student awareness of the challenges associated with this fast and ever-changing field.

Classroom and lab experiences integrate technical and academic course work. Emphasis is placed on theory, servicing, and operation of brakes, electrical/electronic systems, engine performance, steering, suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive-trains.

Upon completion of this curriculum, students should be prepared to take the ASE exam, and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

## ADMISSION INFORMATION: VALID DRIVER’S LICENSE REQUIRED

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>						
MAT	101 Applied Mathematics	2	2	0	0	3
ENG	101 Applied Communication	3	0	0	0	3
<b>Major Courses</b>						
AUT	110 Intro to Auto Technology	2	2	0	0	3
AUT	113 Automotive Servicing	2	6	0	0	4
AUT	115 Engine Fundamentals	2	3	0	0	3
AUT	116 Engine Repair	1	3	0	0	2
AUT	141 Suspension and Steering Systems	2	4	0	0	4
AUT	151 Brake Systems	2	2	0	0	3
AUT	152 Brake Systems Lab	0	2	0	0	1
AUT	161 Electrical Systems	2	6	0	0	4
AUT	164 Automotive Electronics	2	2	0	0	3
AUT	171 Heating and Air Conditioning	2	3	0	0	3
AUT	183 Engine Performance-Fuels	2	3	0	0	3
AUT	184 Engine Performance Fuels-Lab	0	3	0	0	1
AUT	185 Emission Controls	1	2	0	0	2
AUT	231 Manual Drive Trains/Axles	2	3	0	0	3
AUT	232 Manual Drive Trains/Axles Lab	0	3	0	0	1

Total Semester Hours Credit46



# Broadcasting and Production Technology

Diploma  
(D30120)

Students enrolled in the Broadcasting Production Technology curriculum will develop professional skills in radio, television, audio, video, and related applications.

Training will emphasize speech, script writing, production planning, editing, and post production. Students will also study the development of the broadcasting industry, sales, ethics, law, marketing, and management. Hands-on training and teamwork approaches are essential to the instructional process.

Upon successful completion, students are prepared to enter broadcasting, production, and related industries in a variety of occupations.

Title			Class	Lab	Clinical	Work	Credits
<b>General Education Courses (6 SHC)</b>							
ENG	111	Expository Writing	3	0	0	0	3
COM	231	Public Speaking	3	0	0	0	3
<b>Major Courses (13 SHC)</b>							
BPT	110	Intro to Broadcasting	3	0	0	0	3
BPT	111	Broadcast Law and Ethics	3	0	0	0	3
BPT	112	Broadcast Writing	3	2	0	0	4
BPT	113	Broadcast Sales	3	0	0	0	3
<b>Other Required Hours (17 HSC)</b>							
BPT	121	Broadcast Speech I	2	3	0	0	3
BPT	131	Audio/Radio Production I	2	6	0	0	4
BPT	191	Sel. Topics in Broadc.Prod.	1	0	0	0	1
BPT	215	Broadcast Programming	3	0	0	0	3
BPT	231	Video/TV Production I	2	6	0	0	4
COE	111	Co-op Work Experience I	0	0	0	10	1
COE	121	Co-op Work Experience II	0	0	0	10	1
<b>Total Semester Hours Credit:</b>							<b>36</b>

DIPLOMA PROGRAMS

# Civil Engineering Technology

Diploma  
(D40140)

The primary objective of the Diploma Program of the Civil Engineering Technology curriculum is to introduce students to the employment opportunities in civil engineering technology. The objective is fulfilled through the study and application of civil engineering technology courses. All courses in the diploma can be used in the Civil Engineering Technology Associate in Applied Science Degree program.

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>						
ENG 111	Expository Writing	3	0	0	0	3
ENG 114	Professional Research & Reporting	3	0	0	0	3
MAT 121	Algebra/Trigonometry I	2	2	0	0	3
<b>Major Courses</b>						
CIV 125	Civil/Surveying CAD	1	6	0	0	3
CIV 230	Construction Estimating	2	3	0	0	3
CIV 240	Project Management	2	3	0	0	3
CSC 129	Technical Programming	2	3	0	0	3
EGR 115	Introduction to Technology	2	3	0	0	3
EGR 115A	Intro To Technology Lab	0	3	0	0	1
PHY 131	Physics-Mechanics	3	2	0	0	4
SRV 110	Surveying I	2	6	0	0	4
SRV 111	Surveying II	2	6	0	0	4
<b>Select 3 shc from the following courses:</b>						
COE 113	Co-op Work Experience I	0	0	0	30	3
SRV 220	Surveying Law	2	2	0	0	3
<b>Total Semester Hour Credits</b>						<b>40</b>



# Early Childhood Associate

Diploma in Early Childhood Education  
(D55220)

The Child Care Worker is designed to provide training in addition to that required by beginning workers. It does provide training as required by the State of North Carolina but at a level that helps the teacher learn to diagnose the needs of his/her children and prepare appropriate lessons according to those needs.

Title			Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
PSY	150	General Psychology	3	0	0	0	3
MUS	110	Music Appreciation	3	0	0	0	3
Or							
SPA	111	Elementary Spanish	3	0	0	0	3
Or							
SPA	120	Spanish for the Workplace	3	0	0	0	3
<b>Major Courses:</b>							
COE	111	Co-op Work Experience I	0	0	0	10	1
COE	115	Work Exp. Seminar I	1	0	0	0	1
EDU	119	Early Childhood Education	4	0	0	0	4
EDU	131	Child, Family, and Comm.	3	0	0	0	3
EDU	144	Child Development I	3	0	0	0	3
EDU	145	Child Development II	3	0	0	0	3
EDU	146	Child Guidance	3	0	0	0	3
EDU	151	Creative Activities	3	0	0	0	3
EDU	153	Health, Safety, & Nut.	3	0	0	0	3
EDU	221	Children w/ Exceptionalities	3	0	0	0	3
<b>Total Semester Hours Credit:</b>							<b>36</b>

DIPLOMA PROGRAMS

# Electrical/Electronics Technology

Diploma  
(D35220)

The Electrical/Electronics Technology Curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/electronic systems found in residential, commercial, and industrial facilities.

Training, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, digital electronics, programmable logic controllers, industrial motor controls, the National Electric Code, and other subjects specific to local needs.

Graduates should qualify for a variety of jobs in the electrical/electronics field as an on-the-job trainee or apprentice, assisting in the layout, installation and maintenance of electrical/electronic system.

This program can be completed using either a day or evening sequence.

Title			Class	Lab	Clinical	Work	Credits
GENERAL EDUCATION COURSES							
ENG	101	Applied Communication	3	0	0	0	3
MAT	120	Geometry andTrigonometry	2	2	0	0	3
MAJOR COURSES							
BPR	130	Blueprint Reading /Const	1	2	0	0	2
ELC	112	DC/AC Electricity	3	6	0	0	5
ELC	113	Basic Wiring I	2	6	0	0	4
ELC	117	Motors and Controls	2	6	0	0	4
ELC	115	Industrial Wiring	2	6	0	0	4
ELC	118	National Electric Code	1	2	0	0	2
ELC	119	NEC Calculations	1	2	0	0	2
ELC	135	Electrical Machines I	2	2	0	0	3
ELC	128	Intro to PLC	2	3	0	0	3
ELN	229	Industrial Electronics	2	4	0	0	4
Or							
ELN	131	Electronic Devices	2	4	0	0	4
Total Hours							39



# Electronics Engineering Technology

Diploma  
(D40200)

The primary objective of the Diploma Program of the Electronics Engineering Technology curriculum is to introduce students to the employment opportunities in electronics engineering technology. The objective is fulfilled through the study and application of electronics engineering technology courses. All courses in the diploma can be used in the Electronics Engineering Technology Associate in Applied Science Degree program.

This program can be completed using either a day or evening sequence.

Title		Class	Lab	Clinical	Work	Credits
General Education Courses						
ENG	111	Expository Writing	3	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	3
PHY	131	Physics-Mechanics	3	2	0	4
Major Courses						
CET	111	Computer Upgrade/Repair I	2	3	0	3
EGR	115	Introduction to Technology	2	3	0	3
EGR	115A	Intro To Technology Lab	0	3	0	1
ELC	131	DC/AC Circuit Analysis	4	3	0	5
ELC	133	Advanced Circuit Analysis	2	3	0	3
ELN	131	Eletrronics Devices	3	3	0	4
ELN	133	Digital Electronics	3	3	0	4
ELN	150	CAD for Electronics	1	3	0	2
MAT	122	Algebra/Trigonometry II	2	2	0	3
PHY	132	Physics-Electricity & Magnetism	3	2	0	4
Total Semester Hour Credits						42

DIPLOMA PROGRAMS

# Industrial Engineering Technology

Diploma  
(D40240)

The Industrial Engineering Technology curriculum prepares graduates to perform as technical leaders in manufacturing and service organizations. The curriculum incorporates the study and application of methods and techniques for developing, implementing and improving integrated systems involving people, material, equipment and information.

The objectives of the Industrial Engineering Technology Diploma program are to provide a basic understanding of industrial engineering quality and productivity improvement techniques thereby enhancing the training of currently employed manufacturing and service employees. The objectives are fulfilled through the study of courses in quality, productivity, industrial safety, processes, engineering technology and general education courses.

All courses in the diploma program can be applied to the Associate in Applied Science degree in Industrial Engineering Technology. The program can be completed using either a day or evening sequence.

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>						
ENG 111	Expository Writing	3	0	0	0	3
ENG 114	Professional Research & Reporting	3	0	0	0	3
MAT 121	Algebra/Trigonometry I	2	2	0	0	3
<b>Major Courses</b>						
DFT 170	Engineering Graphics	2	2	0	0	3
EGR 115	Introduction to Technology	2	3	0	0	3
EGR 115A	Intro To Technology Lab	0	3	0	0	1
ISC 112	Industrial Safety	2	0	0	0	2
ISC 128	Industrial Leadership	2	0	0	0	2
ISC 132	Manufacturing Quality Control	2	3	0	0	3
ISC 255	Engineering Economy	2	2	0	0	3
MAT 122	Algebra/Trigonometry II	2	2	0	0	3
MEC 145	Manufacturing Materials I	2	3	0	0	3
MEC 245	Manufacturing Materials II	2	3	0	0	3
PHY 131	Physics-Mechanics	3	2	0	0	4
<b>Select 2 shc from the following courses</b>						
CSC 129	Technical Programming	2	2	0	0	3
ISC 222	Project Planning/Control	1	2	0	0	2
ISC 233	Industrial Organization & Management	3	0	0	0	3
ISC 237	Quality Management	2	3	0	0	3
<b>Total Semester Hour Credits</b>						<b>45</b>



# Industrial Systems Technology

Diploma  
(D50240)

The Industrial Systems Technology curriculum is designed to prepare or upgrade individuals to service, maintain, repair or install equipment for a wide range of industries. Instruction includes the theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial equipment and physical facilities.

Students will learn technical skills in blueprint reading, electricity, hydraulics/pneumatics, machining, welding and various maintenance procedures. Practical application in these industrial systems will be emphasized, additional advanced course work may be offered.

Title			Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	101	Applied Comm I	3	0	0	0	3
MAT	101	Applied Math I	2	2	0	0	3
<b>Major Courses</b>							
AHR	120	HVAC Maintenance	1	3	0	0	2
BPR	130	Blueprint Reading/Constu	1	2	0	0	2
CIS	111	Basic PC Literacy	1	2	0	0	2
ELC	112	DC/AC Electricity	36	6	0	0	5
ELC	113	Basic Wiring I	2	6	0	0	4
ELC	117	Motors & Controls	2	6	0	0	4
ELC	128	Intro to PLC	2	3	0	0	3
ISC	112	Industrial Safety	2	0	0	0	2
HYD	110	Hydraulics/Pneumatics	2	3	0	0	3
MAC	111	Machine Technology I	2	12	0	0	6
MNT	110	Intro to Main Practices	1	3	0	0	2
MNT	230	Pumps & Piping Systems	1	3	0	0	2
WLD	112	Basic Welding Processes	1	3	0	0	2
<b>Select 2 SCH from the following</b>							
COE	111	Co-Op Work Exp I	0	0	0	10	1
COE	121	Co-Op Work Exp I	0	0	0	10	1
COE	112	Co-Op Work Exp I	0	0	0	20	2
MNT	111	Maintenance Practices	1	3	0	0	2
MNT	220	Rigging and Moving	1	3	0	0	2
MNT	150	Basic Building Maint	1	3	0	0	2
MNT	240	Indus Equip Troubleshoot	1	3	0	0	2
<b>Total</b>							<b>41</b>

DIPLOMA PROGRAMS

Machining Technology

Diploma  
D50300

The Machining Technology curriculum is designed to develop skills in the theory and safe use of hand tools, power machinery, computerized equipment, and sophisticated precision inspection instruments.

Students will learn to interpret blueprints, set up manual and CNC machines, perform basic and advanced machining operations, and make decision to insure that work quality is maintained.

Employment opportunities for machining technicians exist in manufacturing industries, public institutions, governmental agencies, and a wide range of specialty machining job shops.

Title		Class	Lab	Clinical	Work	Credits
General Education Courses						
ENG	101 Applied Communications	3	0	0	0	3
MAT	101 Applied Mathematics	2	2	0	0	3
Major Courses						
BPR	111 Blueprint Reading	1	2	0	0	2
BPR	121 Blueprint Read:Mech	1	2	0	0	2
MAC	111 Machining Technology I	2	12	0	0	6
MAC	112 Machining Technology II	2	12	0	0	6
MAC	113 Machining Technology III	2	12	0	0	6
MAC	114 Intro to Metrology	2	0	0	0	2
MAC	121 Intro to CNC	2	0	0	0	2
MAC	122 CNC Turning	1	3	0	0	2
MAC	124 CNC Milling	1	3	0	0	2
MAC	222 Advanced CNC Turning	1	3	0	0	2
Total Semester Hour Credits:						38



# Mechanical Engineering Technology

Diploma  
(D40320)

The primary objective of the Diploma Program of the Mechanical Engineering Technology curriculum is to introduce students to the employment opportunities in mechanical engineering technology. The objective is fulfilled through the study and application of mechanical engineering technology courses. All courses in the diploma can be used in the Mechanical Engineering Technology Associate in Applied Science Degree program.

This program can be completed using either a day or evening sequence.

Title			Class	Lab	Clinical	Work	Credits
General Education Courses							
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
ENG	111	Expository Writing	3	0	0	0	3
Major Courses							
ATR	112	Introduction to Automation	2	3	0	0	3
ATR	211	Robot Programming	2	3	0	0	3
CSC	129	Technical Programming	2	3	0	0	3
DFT	111	Technical Drafting I	1	3	0	0	2
DFT	151	CAD I	2	3	0	0	3
DFT	152	CAD II	2	3	0	0	3
EGR	115	Introduction to Technology	2	3	0	0	3
EGR	115A	Intro To Technology Lab	0	3	0	0	1
MAT	122	Algebra/Trigonometry II	2	2	0	0	3
MEC	145	Manufacturing Materials I	2	3	0	0	3
MEC	180	Engineering Materials	2	3	0	0	3
PHY	131	Physics-Mechanics	3	2	0	0	4
Total Semester Hour Credits							40

DIPLOMA PROGRAMS

# Medical Transcription

Diploma  
(D25320)

The Medical Transcription curriculum prepares individuals to become medical language specialist who interpret and transcribe dictation by physicians and other healthcare professionals in order to document patient care and facilitate delivery of healthcare services.

Students will gain extensive knowledge of medical terminology, pharmacology, human diseases, diagnostic studies, surgical procedures, and laboratory procedures. In addition to word processing skills and knowledge of voice processing equipment, students must master English grammar, spelling, and proofreading.

Graduates should qualify for employment in hospitals, medical clinics, doctors' offices, private transcription businesses, research facilities, insurance companies, and publishing companies. After acquiring work experience, individuals can apply to the American Association for Medical Transcription to become Certified Medical Transcriptionists.

	Title	Class	Lab	Clinical	Work	Credits
<b>FALL</b>						
BIO 163	Basic Anatomy & Physiology	4	2	0	0	5
OST 131	Keyboarding	1	2	0	0	2
OST 136	Word Processing	1	2	0	0	2
OST 141	Medical Terminology I	3	0	0	0	3
OST 164	Text Editing Applications	3	0	0	0	<u>3</u>
						15
<b>SPRING</b>						
ENG 111	Expository Writing	3	0	0	0	3
MED 270	Symptomatology	2	2	0	0	3
OST 142	Medical Terminology II	3	0	0	0	3
OST 201	Medical Transcription I	3	2	0	0	4
OST 203	Fundamentals of Medical Doc	3	0	0	0	<u>3</u>
						16
<b>SUMMER</b>						
MED 272	Drug Therapy	3	0	0	0	3
OST 149	Medical Legal Issues	3	0	0	0	3
OST 202	Medical Transcription II	3	2	0	0	4
OST 236	Adv Word/Info Processing	2	2	0	0	<u>3</u>
						13

**Total Hours Required for Graduation: 44**

Course credits (OST and CIS) earned over five years ago will not apply toward the diploma in Medical Transcription.

Most courses taken in this diploma may be applied toward the Associate of Applied Science degree in Medical Office Administration.



In addition to meeting the college’s general admission requirements, applicants to the Medical Transcription Program must meet the following criteria:

Complete the Gaston College Medical Transcription Diploma Program application form (available in CET 34).

Schedule and take the COMPASS examination to determine reading and English placement at Gaston College (this may be scheduled through the Counseling Center). Any developmental deficiencies in reading and English must be completed prior to being accepted into the Medical Transcription Diploma Program.

Schedule and take the American College Test (ACT) examination to determine acceptance scores for admission into the Medical Transcription Diploma Program (this may be scheduled through the Counseling Center).

Applicants must attain a minimum composite score of 17 or higher on the ACT examination or a score of 830 or higher on the Scholastic Aptitude Test (SAT) examination to be admitted into the Medical Transcription Diploma Program. These scores must be current within five years of program admission. Individuals with a previous college degree will have the ACT/SAT examination waived with proof of graduation from an accredited college.

Applicants must submit the completed Medical Transcription Diploma Program application and test scores to the Business and Information Technology Division office in CET 34.

Office Systems Technology-General

Diploma  
(D25360)

The Office Systems Technology-General curriculum is designed for the individual entering, upgrading, or retraining in the office occupations. Special emphasis is on basic office duties and responsibilities for the computerized workplace.

Study in areas such as keyboarding, oral and written communication, word processing, and machine transcription will enable the individual to function effectively as a receptionist, general office technician, or computer operator.

	Title	Class	Lab	Clinical	Work	Credits
<b>FALL</b>						
ACC 115	College Accounting	3	2	0	0	4
CIS 110	Introduction to Computers	2	2	0	0	3
COM 120	Interpersonal Communication	3	0	0	0	3
ENG 111	Expository Writing	3	0	0	0	3
OST 131	Keyboarding	1	2	0	0	<u>2</u>
						15
<b>SPRING</b>						
BUS 260	Business Communication	3	0	0	0	3
ENG 114	Professional Research and Reporting	3	0	0	0	3
or ENG 112	Argument-Based Research					
OST 132	Keyboard Skill Building	1	2	0	0	2
OST 136	Word Processing	1	2	0	0	2
OST 164	Text Editing Applications	3	0	0	0	<u>3</u>
						13
<b>SUMMER</b>						
OST 134	Text/Entry Formatting	2	2	0	0	3
OST 236	Adv. Word/Info Processing	2	2	0	0	3
OST 286	Professional Development	3	0	0	0	3
OST 289	Office Systems Management	2	2	0	0	3
	Natural Science/MAT 115 or Higher	3	0	0	0	<u>3</u>
						15

Total Hours Required for Graduation: 43

Course credits (OST and CIS) earned over five years ago will not apply toward the diploma in Office Systems Technology-General.

The courses taken in this diploma may be applied toward the Associate of Applied Science degree in Office Systems Technology.



# Practical Nursing

Diploma  
D45660

The Practical Nursing curriculum prepares individuals with the knowledge and skills to provide nursing care to children and adults.

Students will participate in assessment, planning, implementing, and evaluating nursing care.

Graduates are eligible to apply to take the National Council Licensure Examination (NCLEX-PN) which is required for practice as a Licensed Practical Nurse. Employment opportunities include hospitals, rehabilitation/long term care/home health facilities, clinics, and physicians' offices.

## *PROGRAM INFORMATION 2005-2006*

Students applying for admission to Gaston College Practical Nursing Program **MUST** meet the requirements for **GENERAL ADMISSION** to the college:

1. Submit to the Admissions Office a completed Application for Admission.
2. Request that your high school mail an official high school transcript to the Admissions Office at Gaston College, 201 Highway 321 South, Dallas, NC 28034. The documentation listed below can be submitted in the place of a traditional high school transcript.
  - Official Adult High School transcript
  - Official copies of GED scores
  - Official transcript from International Correspondence School
  - Official transcript from Home School
3. Request that all colleges previously attended submit official transcripts.
4. Schedule and take the placement test. The placement test may not be required of any person who has scored 500 on the verbal section and 520 on the math section of the SAT. Students who score a 21 or higher on the English portion of the ACT will be exempted from the Writing and Reading portions of the college's placement test. Students who score a 21 or higher on Mathematics portion of the ACT will be exempted from the Math portion of the college's placement test. (All test scores must be less than five years old.) A transfer student who has earned a "C" in both college level math and English from a regionally accredited institution shall have the test waived.

## **ADDITIONAL REQUIREMENTS TO BE ELIGIBLE TO SUBMIT AN APPLICATION TO THE PRACTICAL NURSING PROGRAM:**

1. Must submit a minimum composite score of **18** on the American College Test (ACT) or **850** on the Scholastic Aptitude Test (SAT). Must be taken **within 5 years of date of application**.
2. Must have a grades of "C" or better in all required college courses listed as part of the nursing major (PNE).
3. The required course in Anatomy & Physiology **must be taken within the last 10 years** of making application.

DIPLOMA PROGRAMS

- 4. The ACT will be waived for students who hold a Baccalaureate or higher degree from an accredited college or university.
- 5. International students and U.S. resident applicants whose primary spoken language is not English will be required to demonstrate English proficiency. This may be established by scoring no less than 540 (207 on the computer) on the Test of English as a Foreign Language (TOEFL). The Department Chairperson of the Practical Nursing Program, in consultation with the Dean of the Health Education Institute, will determine the means of demonstrating proficiency on an individual basis. -See College Catalog for more information.
- 6. Current CPR certification (**adult, infant, child and FBAO certification**) is required prior to entrance to the program.
- 7. Students may be required to submit documentation of additional non-academic criteria such as, but not limited to, criminal background checks and urine drug testing.
- 8. Students on academic probation or suspension due to related course work will be denied admission to the Practical Nursing Education Program. A student must have a 2.0 or better for admission.

The final selection of applicants into the program is based on the following criteria, which has been approved by the Admissions Committee made up of the nursing faculty. The final selection of applicants into the program is made by the nursing faculty.

- 1. ACT/SAT score
- 2. Number of required courses completed by end of the Fall Semester prior to entering program.
- 3. Grade Point Average (GPA) in required courses only.

A completed health form documenting satisfactory emotional and physical health is required before entrance into the program by date to be announced by Nursing Department Chairperson. Forms will be provided by the College.

Individuals interested in additional information about the Practical Nursing Program should contact **Beverly Davis, Chairperson Practical Nursing Program at 704-748-1062 or 704-748-1063. Deadline for Practical Nursing Application: March 1.**

PRACTICAL NURSING  
(D45660)

Title			Class	Lab	Clinical	Work	Credits
First Semester							
PSY	110	Life Span Development	3	0	0	0	3
BIO	163	Anatomy & Physiology	4	2	0	0	5
NUR	101	Practical Nursing I	7	6	6	0	11
NUR	118	Nutrition/Diet Therapy	2	0	0	0	2
Semester Total			16	8	6	0	21

Second Semester



<u>ENG</u>	<u>111</u>	<u>Expository Writing</u>	3	0	0	0	3
NUR	102	Practical Nursing II	8	0	12	0	12
NUR	117	Pharmacology	1	3	0	0	2
<b>Semester Total</b>			<b>12</b>	<b>3</b>	<b>12</b>	<b>0</b>	<b>17</b>
<b>Third Semester</b>							
NUR	103	Practical Nursing III	6	0	12	0	10
<b>Semester Total</b>			<b>6</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>10</b>
<b>Total Credit Hours for Graduation</b>							<b>48</b>

*Required non-nursing courses are underlined*

DIPLOMA PROGRAMS

# Therapeutic Massage

Diploma Program  
(D45750)

The Massage Therapy curriculum prepares graduates to work in direct client care settings to provide manipulation, methodical pressure, friction and kneading of the body for maintaining wellness or treating alterations in wellness throughout the lifespan.

Course work includes normal human anatomy and physiology, therapeutic massage, ethical/legal issues, business practices, nutrition, and psychology.

Employment opportunities may be found in hospitals, rehabilitation centers, health departments, home health, medical offices, nursing homes, spas, health and sports clubs, and private practice. Graduates may be eligible to take the National Certification Examination for Therapeutic Massage and Bodywork. National Certification is required for a license to practice massage in many states including North Carolina.

The Therapeutic Massage curriculum offers two options - a degree and a diploma program. Completion of the degree program is highly recommended as it prepares the graduate to be a practitioner with a broader knowledge base in the practice of Therapeutic Massage.

## ADMISSION INFORMATION

Students applying for admission to the Gaston College Therapeutic Massage program **MUST** meet the following requirements for General Admission to the college:

1. Complete general admission application.
2. Completion of ASSET/COMPASS.
  - a. Individuals who have earned a "C" or better in both college-level Math and English courses from a regionally accredited institution shall have the test waived.
  - b. The ASSET/COMPASS test may also be waived of any person who has scored a 500 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT.
3. Submit official transcript of high school grades with graduation date OR GED scores.
4. Submit official college transcript(s), when applicable.
5. Applicants from countries whose language is not English must demonstrate proficiency in the English language by scoring no less than 540 on the Test of English as a Foreign Language (TOEFL).

## ADDITIONAL REQUIREMENTS TO BE ELIGIBLE TO SUBMIT AN APPLICATION TO THE THERAPEUTIC MASSAGE PROGRAM:

1. ASSET/COMPASS test and completion of any identified developmental courses.
2. Must have an overall grade point average of 2.0 or better in required college courses.
3. Must have grades of "C" or better in all related courses.
4. Must have completed the required Biology courses within 5 years from the date academic catalog of application to the program.
5. Current CPR Certification



The following criteria will be utilized by the Admissions Committee in the selection process of recommending applicants for admission to the program:

1. The number of related courses completed by end of the fall semester prior to making application.
2. Grade Point Average (GPA) in related courses.
3. A satisfactory “Criminal Record Check” or a notarized statement stating no record exists from the Clerk of Superior Court at the county courthouse in his/her county of residence. If there have been allegations of a misdemeanor(s) or felony(s) lodged against the applicant s/he must present a notarized “Criminal Record Check” from the county in which the allegations were made.

The selection of applicants into the Program is based on the above criteria. The final selection of applicants into the program is made by the Department Chairperson in consultation with the Dean of Health Education.

A completed health form documenting satisfactory emotional and physical health is required before entrance into the program by date to be announced by the Therapeutic Massage Chairperson.

Title			Class	Lab	Clinical	Work	Credits
<b>First Semester</b>							
<u>BIO</u>	<u>163</u>	<u>Basic Anatomy and Physiology</u>	4	2	0	0	5
<u>MED</u>	<u>121</u>	<u>Medical Terminology I</u>	3	0	0	0	3
<u>PSY</u>	<u>110</u>	<u>Life Span Development</u>	3	0	0	0	3
<u>MTH</u>	<u>110</u>	<u>Fundamentals of Massage</u>	<u>6</u>	<u>12</u>	<u>0</u>	<u>0</u>	<u>10</u>
			16	14	0	0	21
<b>Second Semester</b>							
<u>ENG</u>	<u>111</u>	<u>Expository Writing</u>	3	0	0	0	3
<u>BIO</u>	<u>271</u>	<u>Pathophysiology</u>	3	0	0	0	3
<u>PSY</u>	<u>118</u>	<u>Interpersonal Psychology</u>	3	0	0	0	3
<u>MTH</u>	<u>120</u>	<u>Therapeutic Massage Applications</u>	<u>6</u>	<u>12</u>	<u>0</u>	<u>0</u>	<u>10</u>
			15	12	0	0	19
<b>Third Semester</b>							
<u>MTH</u>	<u>125</u>	<u>Ethics of Massage</u>	2	0	0	0	2
<u>MAT</u>	<u>110+</u>		<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
			5	0	0	0	5
50 hours of independent massage practicum							
<b>Total Required Minimum Semester Hours Credit:</b>							<b>44</b>

\*Upon completion of these requirements the student is eligible for a diploma and may apply for the National Certification Exam for Therapeutic Massage and Bodywork

# Welding Technology

Diploma  
(D50420)

The Welding Technology Curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and non-destructive testing provide the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology curriculum may be employed as entry level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>						
ENG 101	Applied Comm I	3	0	0	0	3
MAT 101	Applied Mathematics I	2	2	0	0	3
<b>Major Courses</b>						
BPR 111	Blueprint Reading	1	2	0	0	2
WLD 110	Cutting Processes	1	3	0	0	2
WLD 115	SMAW (Stick) Plate	2	9	0	0	5
WLD 116	SMAW (Stick) Plate/Pipe	1	9	0	0	4
WLD 121	GMAW (MIG)FCAW/Plate	2	6	0	0	4
WLD 131	GTAW (TIG) Plate	2	6	0	0	4
WLD 141	Symbols & Specifications	2	2	0	0	3
WLD 151	Fabrication I	2	6	0	0	4
WLD 261	Certification Practices	1	3	0	0	2
<b>Total Semester Hour Credits:</b>						<b>36</b>





# Gaston College

## Opportunities For Life

2006-2008 Gaston College Academic Catalog

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## CERTIFICATE PROGRAMS

# Air Conditioning, Heating & Refrigeration

## Cooling Certificate (C35100)

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the air condition industry.

The courses taken in this certificate program count as credit toward the air condition diploma level program..

		Title	Class	Lab	Clinical	Work	Credits
Major Courses:							
AHR	110	Intro to Refrigeration	2	6	0	0	5
ELC	111	Introduction to Electricity	2	2	0	0	3
AHR	130	HVAC Controls	2	2	0	0	3
AHR	133	HVAC Servicing	3	0	0	0	2
AHR	160	Refrigerant Certification	1	0	0	0	1
Hours Required to Qualify:							16

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# Air Conditioning, Heating & Refrigeration

## Heating Certificate (C35100)

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the air condition industry.

The courses taken in this certificate program count as credit toward the air condition diploma level program.

		Title	Class	Lab	Clinical	Work	Credits
Major Courses:							
AHR	112	Heating Technology	2	4	0	0	4
ELC	111	Introduction to Elec	2	2	0	0	3
AHR	130	HVAC Controls	2	2	0	0	3
AHR	140	All Weather Systems 1	3	0	0	0	2
Total Semester Hours Credit:							12



# Air Conditioning, Heating & Refrigeration

## Heat Pump Certification (C35100)

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the air condition industry.

The courses taken in this certificate program count as credit toward the air condition diploma level program..

Title			Class	Lab	Clinical	Work	Credits
Major Courses:							
AHR	110	Intro to Refrigeration	2	6	0	0	5
ELC	111	Introduction to Electricity	2	2	0	0	3
AHR	130	HVAC Controls	2	2	0	0	3
AHR	114	Heat Pump Technology	2	4	0	0	4
AHR	160	Refrigerant Certification	1	0	0	0	1
Total Semester Hours Credit:							16

# Architectural Technology

## Architectural Certification CAD (C40100)

The purpose of this certificate is to provide an opportunity for individuals who want to fulfill professional or general interest needs.

The courses taken in this certificate program count as credit toward the full Architectural Technology AAS degree.

Title			Class	Lab	Clinical	Work	Credits
Major Courses:							
ARC	114	Arch CAD	1	3	0	0	2
ARC	220	Advanced Arch CAD	1	3	0	0	2
ARC	221	Arch 3-D CAD	1	4	0	0	3
CSC	129	Technical Programming	2	3	0	0	3
EGR	115	Intro to Technology	2	6	0	0	4
Total Semester Hour Credits:							14

CERTIFICATE PROGRAMS

Automotive Systems Technology

Automotive Engines and Power Trains

Certificate  
(C60160)

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the automotive industry.

It is recommended that students have the necessary math and reading skills before enrollment in this program.

The courses taken in this certificate program can be counted toward the automotive diploma or AAS program.

		Title	Class	Lab	Clinical	Work	Credits
Major Courses:							
AUT	115	Engine Fundamentals	2	3	0	0	3
AUT	116	Engine Repair	1	3	0	0	2
AUT	231	Manual Drive Trains/Axles	2	3	0	0	3
AUT	232	Manual Drive Trains/Axles-Lab	0	3	0	0	1
AUT	221	Automatic Transmissions	2	6	0	0	4
Total Semester Hours Credit							13

Automotive Systems Technology

Automotive Fuel and Electrical Systems

Certificate  
(C60160)

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the automotive industry.

It is recommended that students have the necessary math and reading skills before enrollment in this program.

The courses taken in this certificate program can be counted toward the automotive diploma or AAS program.

		Title	Class	Lab	Clinical	Work	Credits
Major Courses:							
AUT	164	Automotive Electronics	2	2	0	0	3
AUT	161	Electrical Systems	2	6	0	0	4
AUT	183	Engine Performance Fuels	2	3	0	0	3
AUT	184	Engine Performance Fuels-Lab	0	3	0	0	1
AUT	181	Engine Performance Electrical	2	3	0	0	3
AUT	182	Engine Performance Elec.-Lab	0	3	0	0	1
Total Semester Hours Credit							15



# Basic Computer Skills

Certificate  
(C25260)

The primary objective of the Certificate in Basic Computer Skills is to offer computer literacy and knowledge. This objective will be accomplished through the study of the various application packages currently being used on microcomputers today. Course credits earned over five years ago will not apply toward the Certificate in Basic Computer Skills.

Title			Class	Lab	Clinical	Work	Credits
Major Courses:							
CIS	110	Introduction to Computers	2	2	0	0	3
CIS	120	Spreadsheet I	2	2	0	0	3
CIS	147	Operating Sys. - Windows	2	2	0	0	3
CIS	152	Database Concepts & App.	2	2	0	0	3
CIS	172	Intro to the Internet	2	3	0	0	3
OST	136	Word Processing	1	2	0	0	2
Total Hours Required to Qualify:							17

# Basic Law Enforcement Training

Certificate  
(C55120)

Basic Law Enforcement Training (BLET) is designed to give students essential skills required for entry-level employment officers with state, county or municipal government, or with private enterprise.

## Basic Law enforcement Training Admission Requirements

1. Student must be twenty (20) years old at the time of course registration.
2. Student must be a high school graduate or equivalent.
3. Student is required to have a personal interview with the Criminal Justice Academy Director.
4. Student should present a letter of recommendation or sponsorship from the chief/sheriff of a police department, but not a requirement.
5. Student must present a clean criminal record report (no felonies).
6. Student must complete a Compass Reading Placement Test administered by the Staff of Gaston College prior to enrollment. Contact the Admissions Office at 704-922-6214 for an appointment to schedule your reading test.
7. Student must present a valid N.C. Drivers License.

\*Priority admission is granted to those individuals holding full-time employment with criminal justice agencies.

CERTIFICATE PROGRAMS

BASIC LAW ENFORCEMENT TRAINING PROGRAM COURSES

	Title	Class	Lab	Clinical	Work	Credits
Major Courses:						
CJC	100	Basic Law Enforcement Training	9	27	0	0
TOTAL SEMESTER CREDITS						18

Day and Evening Basic Law Enforcement Training Program Course List

1.	Course Orientation					4
2.	Physical Fitness Training					54
3.	Ethics for Professional Law Enforcement					4
4.	Arrest, Search & Seizure/Constitutional Law					28
5.	Elements of Criminal Law					24
6.	Communication Skills for Law Enforcement Officers					8
7.	Law Enforcement Radio Procedures & Information Systems					8
8.	Field Notetaking & Report Writing					12
9.	Interviews: Field & In-Custody					16
10.	Subject Control/Arrest Techniques					40
11.	Juvenile Laws & Procedures					8
12.	Fingerprinting & Photographing Arrestees					6
13.	Dealing With Victims/Public					10
14.	Firearms					48
15.	Criminal Investigations					32
16.	ABC Laws & Procedures					4
17.	Motor Vehicle Laws					20
18.	Law Enforcement Driver Training					40
19.	Crime Prevention Techniques					6
20.	First Responder					40
21.	Domestic Violence Response					12
22.	Controlled Substances					10
23.	Techniques of Traffic Law Enforcement					24
24.	In-Custody Transportation					8
25.	Traffic Accident Investigations					20
26.	Explosives & Hazardous Materials Emergencies					12
27.	Individuals with Mental Illness & Mental Retardation					8
28.	Crowd Management					12
29.	Preparing for Court & Testifying in Court					12
30.	Patrol Techniques					20
31.	Sheriff's Responsibilities: Detention Duties					4
32.	Sheriff's Responsibilities: Court Duties					6
33.	Civil Process					24
34.	TESTING					7
TOTAL						602



# Broadcasting and Production Technology

Certificate  
(C30120)

Students enrolled in the Broadcasting Production Technology curriculum will develop professional skills in radio, television, audio, video, and related applications.

Training will emphasize speech, script writing, production planning, editing, and post production. Students will also study the development of the broadcasting industry, sales, ethics, law, marketing, and management. Hands-on training and teamwork approaches are essential to the instructional process.

Upon successful completion, students are prepared to enter broadcasting, production, and related industries in a variety of occupations.

Title			Class	Lab	Clinical	Work	Credits
Major Courses: (13 SHC)							
BPT	110	Intro to Broadcasting	3	0	0	0	3
BPT	111	Broadcast Law and Ethics	3	0	0	0	3
BPT	112	Broadcast Writing	3	2	0	0	4
BPT	113	Broadcast Sales	3	0	0	0	3
Total Semester Hours Credit:							13

## Business Administration

Human Resources Management Concentration  
Certificate  
(C2512C)

The purpose of this certificate is to provide an opportunity for individuals to gain the basic knowledge necessary for entry-level skills in human resources or for individuals already in the human resources field who desire updated and/or in-depth information.

The courses taken in this certificate may be applied toward the Business Administration-Human Resources Management degree program.

Title			Class	Lab	Clinical	Work	Credits
Major Courses:							
BUS	217	Employment Law & Regulations	3	0	0	0	3
BUS	234	Training and Development	3	0	0	0	3
BUS	256	Recruitment Selection & Per Plan	3	0	0	0	3
BUS	258	Compensation and Benefits	3	0	0	0	3
Total Hours Required to Qualify:							12

CERTIFICATE PROGRAMS

## Business Administration

### Logistics Management Concentration

Certificate

(C2512E)

The purpose of this certificate is to provide the basic knowledge necessary for a diverse set of occupations in transportation, warehousing, logistics, and inventory control.

The courses taken in this certificate may be applied toward the Business Administration-Logistics Management degree program.

	Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses:</b>						
BUS 115	Business Law I	3	0	0	0	3
LOG 110	Introduction to Logistics	3	0	0	0	3
LOG 120	Global Logistics	3	0	0	0	3
LOG 230	Transportation Management	3	0	0	0	3
<b>Total Hours Required to Qualify:</b>						<b>12</b>

## Civil Engineering Technology

Certificate

(C40140)

The primary objective of the Certificate Program of the Civil Engineering Technology curriculum is to introduce students to the employment opportunities in civil engineering technology generally and to surveying in particular. The objective is fulfilled through the study and application of civil engineering technology courses. All courses in the certificate can be used in the Civil Engineering Technology Associate in Applied Science Degree program.

This program can be completed using a day sequence.

	Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses:</b>						
CIV 230	Construction Estimating	2	3	0	0	3
<b>Or</b>						
CIV 240	Project Management	2	3	0	0	3
CSC 129	Technical Programming	2	3	0	0	3
SRV 110	Surveying I	2	6	0	0	4
EGR 115	Introduction to Technology	2	3	0	0	3
EGR 115A	Intro To Technology Lab	0	3	0	0	1
MAT 121	Algebra/Trigonometry I	2	2	0	0	3
<b>Total Semester Hour Credits</b>						<b>17</b>



# Computerized Accounting

Certificate  
(C25100A)

The Computerized Accounting Certificate is designed to provide students with the basic knowledge and skills necessary to utilize a computer to record accounting transactions using general ledger accounting software and also to utilize spreadsheet software for accounting applications.

In addition to course work in accounting principles, theories, and practices students will complete a course in computer fundamentals and an introductory course in accounting spreadsheets utilizing Microsoft Excel.

Title			Class	Lab	Clinical	Work	Credits
CIS	110	Introduction to Computers	2	2	0	0	3
ACC	120	Principles of Financial Accounting	3	2	0	0	4
ACC	121	Principles of Managerial Accounting	3	2	0	0	4
ACC	149	Introduction to Accounting Spreadsheets	1	2	0	0	2
Total Hours Required to Qualify:							13

The courses taken in this certificate program may be applied toward the Associate of Science degree in Accounting.

## Dietary Manager

Certificate  
(C45310)

The Dietary Managers Program prepares individuals to be a trained foodservice professional. Dietary Managers specialize in cost containment programs, supervise staff, develop and maintain high levels of sanitation and partner with Registered Dietitian to understand and meet the basic nutritional needs of clients.

Employment opportunities include hospitals, correctional centers, nursing homes, public health agencies, schools, retirement centers, hospices, home care agencies and commercial food service systems.

Course work includes content related to food, nutrition, communication, management, and sanitation. The Dietary Manager student must complete all course requirements including 150 clinical experience hours.

CERTIFICATE PROGRAMS

DIETARY MANAGER ADMISSION INFORMATION

Students applying for admission to the Gaston College Dietary Managers Program **MUST** meet the following requirements for GENERAL ADMISSION to the college:

- 1. Submit to the admissions office a completed Application for Admission.
- 2. Request your high school mail an official high school transcript to the Admissions Office at Gaston College, 201 Highway 321 S., Dallas, NC 28034-1499. The documentation can be submitted in the place of a traditional high school transcript.
  - a. Official Adult High School Transcript
  - b. Official copies of GED scores
  - c. Official transcript from International Correspondence School
  - d. Official transcript from Home School
- 3. Request that all colleges previously attended submit official transcripts.
- 4. Schedule and take the Placement Test. The Placement Test may not be required of any person who has scored 500 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT. (All test scores must be less than five years old.) A transfer student who has earned a “C” in both college level, math and English from a regionally accredited institution shall have the test waived.
- 5. International students must meet all admission requirements listed under General Admission Requirements. Proof of English proficiency is required. This may be established by making a minimum score of 540 (207 on the computer) on the Test of English as a Foreign Language (TOEFL).
- 6. Student must be 18 years of age.

DIETARY MANAGER

Title			Class	Lab	Clinical	Work	Credits
DET	115	Dietetic Technician II	2	0	0	0	2
DET	220	Dietetic Technician V	6	0	12	0	10

Early Childhood Associate

Infants/Toddler Certificate  
(C55220A)

Title			Class	Lab	Clinical	Work	Credits
Major Courses:							
EDU	119	Early Childhood Education	4	0	0	0	4
EDU	146	Child Guidance	3	0	0	0	3
EDU	153	Health, Safety, & Nutrition	3	0	0	0	3
EDU	234	Infants, Toddlers, & Two	3	0	0	0	3
EDU	131	Child, Family, and Comm.	3	0	0	0	3

Total Semester Hours Credit: 16



Early Childhood Associate

Administration Certificate  
(C55220B)

Title		Class	Lab	Clinical	Work	Credits
Major Courses:						
EDU 119	Early Childhood Education	4	0	0	0	4
EDU 146	Child Guidance	3	0	0	0	3
EDU 153	Health, Safety, & Nut.	3	0	0	0	3
EDU 261	Early Childhood Admin I	2	0	0	0	2
EDU 262	Early Childhood Admin II	3	0	0	0	3
Total Semester Hours Credit:						15

Early Childhood Associate

Early Childhood Certificate  
(C55220C)

Title		Class	Lab	Clinical	Work	Credits
Major Courses:						
EDU 119	Early Childhood Education	4	0	0	0	4
EDU 146	Child Guidance	3	0	0	0	3
EDU 153	Health, Safety, & Nut.	3	0	0	0	3
EDU 151	Creative Activities	3	0	0	0	3
EDU 259	Curriculum Planning	3	0	0	0	3
Total Semester Hours Credit:						16

Early Childhood Associate

School Age Certificate  
(C55220D)

Title		Class	Lab	Clinical	Work	Credits
Major Courses:						
EDU 119	Early Childhood Education	4	0	0	0	4
EDU 146	Child Guidance	3	0	0	0	3
EDU 153	Health, Safety, & Nut.	3	0	0	0	3
EDU 235	School-Age Dev. & Program	2	0	0	0	2
EDU 145	Child Development II	3	0	0	0	3
Total Semester Hours Credit:						15

CERTIFICATE PROGRAMS

Early Childhood Associate

Special Needs Certificate  
(C55220E)

Title			Class	Lab	Clinical	Work	Credits
Major Courses:							
EDU	119	Early Childhood Education	4	0	0	0	4
EDU	146	Child Guidance	3	0	0	0	3
EDU	153	Health, Safety, & Nut.	3	0	0	0	3
EDU	131	Child, Family, & Community	3	0	0	0	3
EDU	221	Children w/ Special Needs	3	0	0	0	3
Total Semester Hours Credit:							16

Electrical/Electronics Technology

Certificate  
C35220

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the Electrical field.

The courses taken in this certificate program count as credit toward the full Electrical/Electronics Technology program.

Title			Class	Lab	Clinical	Work	Credits
Major Courses							
ELC	112	AC/DC Electricity	3	6	0	0	5
ELC	113	Basic Wiring I	2	6	0	0	4
ELC	117	Motors & Controls	2	9	0	0	4
ELC	115	Industrial Wiring	2	6	0	0	4
ELN	229	Industrial Electronics	2	4	0	0	4
ELC	118	National Electric Code	1	2	0	0	2
ELC	119	NEC Calculations	1	2	0	0	2
ELC	135	Electrical Machine I	2	2	0	0	3
ELC	128	Intro to PLC	2	3	0	0	3

\*A student may choose any 18-semester credits from the above courses.



# Electronics Engineering Technology

Certificate  
(C40200)

The primary objective of the Certificate Program of the Electronics Engineering Technology curriculum is to introduce students to the employment opportunities in electronics engineering technology. The objective is fulfilled through the study and application of electronics engineering technology courses. All courses in the certificate can be used in the Electronics Engineering Technology Associate in Applied Science Degree program.

Title		Class	Lab	Clinical	Work	Credits
<b>Major Courses:</b>						
EGR 115	Introduction to Technology	2	3	0	0	3
EGR 115A	Intro To Technology Lab	0	3	0	0	1
ELC 131	DC/AC Circuit Analysis	4	3	0	0	5
ELN 133	Digital Electronics	3	3	0	0	4
MAT 121	Algebra/Trigonometry I	2	2	0	0	3
<b>Total Semester Hour Credits</b>						<b>16</b>

## Federal Income Tax

Certificate  
(C25100B)

The Federal Income Tax Certificate is designed to provide students with the basic knowledge and skills necessary to prepare federal individual income tax returns.

In addition to course work in accounting principles, theories, and practices students will complete two courses in federal income taxation and an introductory course in accounting spreadsheets utilizing Microsoft Excel.

Title		Class	Lab	Clinical	Work	Credits
ACC 120	Principles of Financial Accounting	3	2	0	0	4
ACC 121	Principles of Managerial Accounting	3	2	0	0	4
ACC 129	Individual Income Taxes	2	2	0	0	3
ACC 130	Business Income Taxes	2	2	0	0	3
ACC 149	Introduction to Accounting Spreadsheets	1	2	0	0	2
<b>Hours Required to Qualify</b>						<b>16</b>

The courses taken in this certificate program may be applied toward the Associate of Applied Science degree in Accounting.

CERTIFICATE PROGRAMS

# Industrial Engineering Technology

Certificate  
(C40240)

The Industrial Engineering Technology curriculum prepares graduates to perform as technical leaders in manufacturing and service organizations. The curriculum incorporates the study and application of methods and techniques for developing, implementing and improving integrated systems involving people, material, equipment and information.

The objectives of the Industrial Engineering Technology Certificate Program are to introduce students to industrial engineering quality and productivity improvement techniques and to enhance the training of currently employed manufacturing and service employees.

The objectives are fulfilled through the study and application of industrial engineering techniques including process analysis, SPC, safety training and productivity analysis.

All courses in the Certificate Program can be applied to the Associate in Applied Science degree in Industrial Engineering Technology. The program can be completed using either a day or evening sequence.

		Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses:</b>							
DFT	170	Engineering Graphics	2	2	0	0	3
ISC	112	Industrial Safety	2	0	0	0	2
ISC	132	Manufacturing Quality Control	2	3	0	0	3
ISC	136	Productivity Analysis I	2	3	0	0	3
ISC	236	Productivity Analysis II	2	3	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
<b>Total Semester Hour Credits</b>							<b>17</b>



# Industrial Management Technology

Certificate  
(C40240C)

The objectives of the Industrial Management Technology Certificate Program are to introduce students to industrial management practices and to enhance the training of currently employed individuals in leadership and management skills.

The objectives are fulfilled through the study and application of industrial management techniques including inventory management, production planning and management processes.

All courses in the Certificate Program can be applied to the Associate in Applied Science degree in Industrial Engineering Technology. The program can be completed using either a day or evening sequence.

Title			Class	Lab	Clinical	Work	Credits
Major Courses:							
ISC	112	Industrial Safety	2	0	0	0	2
ISC	128	Industrial Leadership	2	0	0	0	2
ISC	233	Industrial Organization & Management	3	0	0	0	3
ISC	243	Production & Operations Management I	2	3	0	0	3
ISC	244	Production & Operations Management II	2	3	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
Total Semester Hour Credits							16

# Industrial Systems Technology

Certificate  
(C50240)

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the Industrial Systems field.

The courses taken in this certificate program count as credit toward the full Industrial Systems Technology diploma program.

Title			Class	Lab	Clinical	Work	Credits
Major Courses:							
BPR	130	Blueprint Reading/Constu	1	2	0	0	2
ELC	113	Basic Wiring I	2	6	0	0	4
HYD	110	Hydraulics/Pneumatics	2	3	0	0	3
MNT	110	Intro to Main Practices	1	3	0	0	2
MNT	230	Pumps & Piping Systems	1	3	0	0	2
WLD	112	Basic Welding Processes	1	3	0	0	2
Total Semester Hours Credit							15

CERTIFICATE PROGRAMS

Machining Technology

Certificate  
(C50300)

Manual Machine Operation I

This curriculum is designed to give an individual entry level skill needed to gain employment as a machinist or (CNC) Computer Numerical Control Programmer.

It is recommended that students have the necessary math and reading skill before enrollment in this program

The courses taken in this certificate program can be counted toward the machinist diploma or A.A.S program.

		Title	Class	Lab	Clinical	Work	Credits
Major Courses:							
BPR	111	Blueprint Reading	1	2	0	0	2
MAC	111	Machining Technology I	2	12	0	0	6
MAC	114	Introduction to Metrology	2	0	0	0	2
MAC	121	Intro to CNC (1st 8 weeks)	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>
			7	14	0	0	12

Machining Technology

Certificate  
(C50300)

(CNC) Turning and Manual Machine Operation

This curriculum is designed to give an individual entry level skill needed to gain employment as a machinist or (CNC) Computer Numerical Control Programmer.

It is recommended that students have the necessary math and reading skill before enrollment in this program

The courses taken in this certificate program can be counted toward the machinist diploma or A.A.S program.

		Title	Class	Lab	Clinical	Work	Credits
Major Courses:							
BPR	111	Blueprint Reading	1	2	0	0	2
MAC	111A	Machining Technology I	1	4	0	0	2
MAC	114	Introduction to Metrology	2	0	0	0	2
MAC	121	Intro to CNC	2	0	0	0	2
BPR	121	Blueprint Reading:Mechanical	1	2	0	0	2
MAC	122	CNC Turning	1	3	0	0	2
MAC	222	Advanced CNC Turning	<u>1</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>2</u>
			9	14	0	0	14



# Machining Technology

Certificate  
(C50300)

## (CNC) Computer Numerical Control and (CAM) Computer Aided Manufacturing

This curriculum is designed to give an individual entry level skill needed to gain employment as a machinist or (CNC) Computer Numerical Control Programmer.

It is recommended that students have the necessary math and reading skill before enrollment in this program

The courses taken in this certificate program can be counted toward the machinist diploma or A.A.S program.

Title		Class	Lab	Clinical	Work	Credits
<b>Major Courses:</b>						
MAC 121	Intro CNC	2	0	0	0	2
MAC 122	CNC Turning	1	3	0	0	2
MAC 222	Advanced CNC Turning	1	3	0	0	2
MAC 124	CNC Milling`	1	3	0	0	2
MAC 224	Advanced CNC Milling	1	3	0	0	2
MAC 231	CNC Graphics Prog; Turning	1	4	0	0	3
MAC 232	CNC Graphics Prog: Milling	<u>1</u>	<u>4</u>	<u>0</u>	<u>0</u>	<u>3</u>
		8	20	0	0	16

# Mechanical Engineering Technology

Certificate  
(C40320)

The primary objective of the Certificate Program of the Mechanical Engineering Technology curriculum is to introduce students to the employment opportunities in mechanical engineering technology. The objective is fulfilled through the study and application of mechanical engineering technology courses. All courses in the certificate can be used in the Mechanical Engineering Technology Associate in Applied Science Degree program.

Title		Class	Lab	Clinical	Work	Credits
<b>Major Courses:</b>						
ATR 112	Introduction to Automation	2	3	0	0	3
CSC 129	Technical Programming	2	3	0	0	3
DFT 111	Technical Drafting I	1	3	0	0	2
EGR 115	Introduction to Technology	2	3	0	0	3
EGR 115A	Intro To Technology Lab	0	3	0	0	1
MAT 121	Algebra/Trigonometry I	2	2	0	0	3
MEC 145	Manufacturing Materials I	2	3	0	0	3

**Total Semester Hour Credits** **18**

CERTIFICATE PROGRAMS

Medical Office Administration—Basic

Certificate  
(C25310A)

These curricula prepare individuals for entry-level employment in medical and other health-care related offices.

Employment opportunities are available in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other health-care related organizations.

The courses taken in these certificates may be applied toward the Medical Office Administration degree program; however, OST course credits earned over five years ago will not apply toward the certificates or degree in Medical Office Administration.

Title			Class	Lab	Clinical	Work	Credits
OST	131	Keyboarding	1	2	0	0	2
OST	132	Keyboard Skill Building	1	2	0	0	2
OST	136	Word Processing	1	2	0	0	2
OST	141	Medical Terminology I-Med Office	3	0	0	0	3
OST	142	Medical Terms II-Med Office	3	0	0	0	3
OST	149	Medical Legal Issues	3	0	0	0	3
OST	164	Text Editing Applications	3	0	0	0	3

Total Hours Required to Qualify: 18

Medical Office Administration—Intermediate

Certificate  
(C25310B)

Completion of the Medical Office Administration - Basic certificate is required before beginning the intermediate certificate.

Title			Class	Lab	Clinical	Work	Credits
OST	134	Text Entry and Formatting	2	2	0	0	3
OST	135	Advanced Text Entry & Formatting	3	2	0	0	4
OST	148	Med. Coding, Billing & Insurance	3	0	0	0	3
OST	236	Adv. Word/Information Proc.	2	2	0	0	3
OST	243	Medical Office Simulation	2	2	0	0	3

Total Hours Required to Qualify: 16



# Nursing Assistant

Certificate  
C45480

The Nursing Assistant curriculum prepares individuals to work under the supervision of licensed health care professionals in performing nursing care and services for persons of all ages.

Course work emphasizes growth and development throughout the life span, personal care, vital signs, communication, nutrition, medical asepsis, therapeutic activities, accident and fire safety, household environment and equipment management; family resources and services; and employment skills.

Graduates of this curriculum may be eligible to be listed on the registry as a Nursing Assistant I and Nursing Assistant II. They may be employed in home health agencies, hospitals, clinics, nursing homes, extended care facilities, and doctors' offices.

Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>					
NAS 101* Nursing Assistant I	3	4	6	0	6
NAS 102 Nursing Assistant II	3	2	6	0	6
NAS 103 Home Health Care	2	0	0	0	2
<b>Total Semester Hours Credit</b>					<b>14</b>

## NAS 101 (Nursing Assistant I)

### ADMISSION INFORMATION

Students applying for admission to the Gaston College Nursing Assistant program **MUST** meet the following requirements for GENERAL ADMISSION to the college:

1. Submit to the Admissions Office a completed Application for Admission.
2. Request that your high school mail an official high school transcript to the Admissions Office at Gaston College, 201 Highway 321 S., Dallas, NC 28034-1499. The documentation listed below can be submitted in the place of a traditional high school transcript:
  - Official Adult High School transcript
  - Official copies of GED scores (minimum score of 225 and no subscore less than 35)
  - Official transcript from International Correspondence School
  - Official transcript from Home School

***NOTE:** High school graduation is not required prior to admission to the Nursing Assistant I class.*

3. Request that all colleges previously attended submit official transcripts.
4. Schedule and take the placement test. COMPASS scores must be a minimum of 51 on the reading portion and 18 on the math portion, and ASSET scores must be a minimum

CERTIFICATE PROGRAMS

of 33 on the reading portion and 30 on the math portion. The placement test may not be required of any person who has scored 500 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT. (All test scores must be less than five years old.) A transfer student who has earned a “C” in both college level math and English from a regionally accredited institution shall have the test waived.

5. International students will be required to demonstrate English proficiency. This may be established by scoring no less than 540 (207 on the computer) on the Test of English as a Foreign Language (TOEFL). United States resident applicants whose primary spoken language is not English will be required to demonstrate English proficiency. This may be established by scoring no less than 540 (207 on the computer) on the TOEFL. The Department Chairperson of the Nursing Assistant Program, in consultation with the Dean of the Health Education Institute, will determine the means of demonstrating proficiency on an individual basis.

## ADDITIONAL REQUIREMENTS TO BE ELIGIBLE TO REGISTER FOR THE NURSING ASSISTANT PROGRAM:

1. Complete a separate application packet for the nursing assistant program.
2. Provide an official social security card and official picture identification. Names must match on these two documents. The Listing Agency for Nursing Assistants in North Carolina (DFS) requires an official social security card allowing the holder to work in the U.S. before listing anyone on the Registry. If names do not match, packet will be returned marked incomplete.
3. Criminal Background Checks and Drug Screening: In order to comply with current Student Affiliation Agreements, students accepted into the Nursing Assistant Certificate Program will be required to submit a Criminal Background Check and Drug Screening according to Gaston College procedures prior to placement in a clinical facility. The facility reserves the right to deny the student access to the facility. If the student is denied access, the student will not be allowed to complete the program. Completion of clinical experiences is required for the satisfactory completion of the program. More information will be provided upon acceptance into the program.
4. Admissions to the Nursing Assistant Program are conditional pending receipt of the “Student Medical Form for Programs that Require Health Forms In North Carolina Community College System Institutions.” The form must be completed in its entirety and must demonstrate evidence of a physical exam within one (1) year prior to the date of the submission of the form. The form must document satisfactory emotional and physical health. This form is included in the application packet.
  - a. Prospective students with known or suspected communicable or other serious illnesses are ethically and legally obligated to evaluate their health status in view of client safety. In addition, a physician’s statement must be provided documenting that the disease state has been resolved or adequately controlled.
  - b. Laboratory documentation must be submitted denoting no actively infectious disease process. Hepatitis B vaccine is required for all nursing assistant students. Should the student choose to decline the Hepatitis B vaccine, he/she will need to sign a declination form which is included in the packet.
  - c. The health form must be completed by a duly licensed physician, physician assistant, or nurse practitioner and must be submitted to the Nursing Assistant department with the packet.
  - d. The student should provide documentation of the following immunizations:



1. Tuberculosis skin test in last 12 months
2. Tetanus shot in last ten years
3. MMR and booster if born after January 1957
4. Hepatitis immunization series or copy of declination form and/or waiver
5. Certification of Chicken Pox immunity or history of disease

A fee receipt from the Gaston College Business Office documenting payment of malpractice insurance must be provided the first day of class. This insurance is paid at the time registration fees are paid.

Students are accepted based on the date and time completed packets are returned. Only complete packets will be accepted. Incomplete packets will be returned to applicants with an explanation of reason for return. Applicants will be notified in a timely manner whether they are accepted or placed on a waiting list.

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### NAS 102 (Nursing Assistant II)

#### ADMISSION INFORMATION

Students applying for admission to the Gaston College Nursing Assistant program **MUST** meet the following requirements for GENERAL ADMISSION to the college:

1. Submit to the Admissions Office a completed Application for Admission.
2. Request that your high school mail an official high school transcript to the Admissions Office at Gaston College, 201 Highway 321 S., Dallas, NC 28034-1499. High school graduation is required prior to admission to the Nursing Assistant II class. The documentation listed below can be submitted in the place of a traditional high school transcript:
  - Official Adult High School transcript
  - Official Copies of GED scores(minimum score of 225 and no subscore less than 35)
  - Official transcript from International Correspondence School
  - Official transcript from Home School
3. Request that all colleges previously attended submit official transcripts.
4. Schedule and take the placement test. COMPASS scores must be a minimum of 51 on the reading portion and 18 on the math portion, and ASSET scores must be a minimum of 33 on the reading portion and 30 on the math portion. The placement test may not be required of any person who has scored 500 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT. (All test scores must be less than five years old.) A transfer student who has earned a "C" in both college level math and English from a regionally accredited institution shall have the test waived.
5. International students will be required to demonstrate English proficiency. This may be established by scoring no less than 540 (207 on the computer) on the Test of English as a Foreign Language (TOEFL). United States resident applicants whose primary spoken language is not English will be required to demonstrate English proficiency. This may be established by scoring no less than 540 (207 on the computer) on the TOEFL. The Department Chairperson of the Nursing Assistant Program, in consultation with the Dean of the Health Education Institute, will determine the means of demonstrating proficiency on an individual basis.



## ADDITIONAL REQUIREMENTS TO BE ELIGIBLE TO REGISTER FOR THE NURSING ASSISTANT PROGRAM:

1. Complete a separate application packet for the nursing assistant program.
2. Provide an official social security card and official picture identification.
3. Criminal Background Checks and Drug Screening: In order to comply with current Student Affiliation Agreements, students accepted into the Nursing Assistant Certificate Program will be required to submit a Criminal Background Check and Drug Screening according to Gaston College procedures prior to placement in a clinical facility. The facility reserves the right to deny the student access to the facility. If the student is denied access, the student will not be allowed to complete the program. Completion of clinical experiences is required for the satisfactory completion of the program. More information will be provided upon acceptance into the program.
4. Admissions to the Nursing Assistant Program are conditional pending receipt of the "Student Medical Form for Programs that Require Health Forms In North Carolina Community College System Institutions." The form must be completed in its entirety and must demonstrate evidence of a physical exam within one (1) year prior to the date of the submission of the form. The form must document satisfactory emotional and physical health. Health forms will be sent with acceptance letters.
  - a. Prospective students with known or suspected communicable or other serious illnesses are ethically and legally obligated to evaluate their health status in view of client safety. In addition, a physician's statement must be provided documenting that the disease state has been resolved or adequately controlled.
  - b. Laboratory documentation must be submitted denoting no actively infectious disease process. Hepatitis B vaccine is required for all nursing assistant students. Should the student choose to decline the Hepatitis B vaccine, he/she will need to sign a declination form which is available in the Health Science Office.
  - c. The health form must be completed by a duly licensed physician, physician assistant, or nurse practitioner and must be submitted to the Nursing Assistant department at the orientation session prior to the start of classes.
  - d. The student should provide documentation of the following immunizations:
    1. Tuberculosis skin test in last 12 months
    2. Tetanus shot in last ten years
    3. MMR and booster if born after January 1957
    4. Hepatitis immunization series or copy of declination form and/or waiver and evidence of education concerning danger of exposure in the workplace (Will cover this the first week of class.)
    5. Certification of Chicken Pox immunity

A fee receipt from the Gaston College Business Office documenting payment of malpractice insurance must be provided the first day of class. This insurance is paid at the time registration fees are paid.

Must present a certificate showing they have completed a State approved Nursing Assistant I class of 75 to 120 hours and must be currently listed with the North Carolina Division of Facility Services as a Nursing Assistant I.

Must have a high school diploma or GED.

Students are accepted based on the date and time completed packets are returned. Only complete packets will be accepted. Incomplete packets will be returned to applicants with an explanation of reason for return. Applicants will be notified in a timely manner whether they are accepted or placed on a waiting list.



# Office Systems Technology-General

Certificate  
(C25360)

The Office Systems Technology-General certificate curriculum prepares individuals for entry-level positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic, computerized workplace.

The courses taken in this certificate may be applied toward the Office Systems Technology diploma and degree programs; however, OST course credits earned over five years ago will not apply toward the certificate, diploma or degree in Office Systems Technology.

Title			Class	Lab	Clinical	Work	Credits
CIS	110	Introduction to Computers	2	2	0	0	3
OST	122	Office Computations	1	2	0	0	2
OST	131	Keyboarding	1	2	0	0	2
OST	132	Keyboard Skill Building	1	2	0	0	2
OST	136	Word Processing	1	2	0	0	2
OST	164	Text Editing	3	0	0	0	3
OST	184	Records Management	1	2	0	0	2
Total Hours Required to Qualify:							16

CERTIFICATE PROGRAMS

# Office Systems Technology-Basic Legal

Certificate  
(C2536AA)

These curricula prepare individuals for entry-level positions in legal or government-related offices and provide professional development for the currently employed.

The courses taken in these certificates may be applied toward the Legal Office Systems Technology degree program; however, OST course credits earned over five years ago will not apply toward the certificates or degree in Office Systems Technology-Legal.

		Title	Class	Lab	Clinical	Work	Credits
BUS	115	Business Law I	3	0	0	0	3
OST	131	Keyboarding	1	2	0	0	2
OST	132	Keyboard Skill Building	1	2	0	0	2
OST	136	Word Processing	1	2	0	0	2
OST	155	Legal Terminology	3	0	0	0	3
OST	164	Text Editing Applications	3	0	0	0	3
Total Hours Required to Qualify:							15

## Office Systems Technology-Intermediate Legal

Certificate  
(C2536AB)

*Completion of the Office Systems Technology-Basic Legal certificate is required before beginning the intermediate certificate.*

		Title	Class	Lab	Clinical	Work	Credits
OST	134	Text Entry and Formatting	2	2	0	0	3
OST	135	Adv. Text Entry & Formatting	3	2	0	0	4
OST	156	Legal Office Procedures	2	2	0	0	3
OST	236	Advanced Word Processing	2	2	0	0	3
OST	252	Legal Transcription	2	2	0	0	3
Total Hours Required to Qualify:							16



# Phlebotomy

Certificate  
(C45600)

The Gaston College Phlebotomy Certificate Program runs once a year in the Spring Semester only. The Phlebotomy curriculum prepares individuals to obtain blood and other specimens for the purpose of laboratory analysis.

Course work includes proper specimen collection and handling, communications skills, and maintaining patient data.

Graduates may qualify for employment in hospitals, clinics, physicians' offices, and other health care settings and may be eligible for national certification as phlebotomy technicians.

## SPECIFIC PROGRAM REQUIREMENTS

In addition to meeting the college admission requirements, applicants to the Phlebotomy Certificate Program must meet the following criteria:

1. Must be a high school or GED graduate.
2. Attain a minimum composite score of 15 on the ACT examination to be considered for admission. Exam scores must be current within 5 years prior to entry. Individuals with a previous college degree will have the ACT examination waived with proof of graduation from an accredited college.
3. Take the College Placement Test. This can be scheduled through the Gaston College Admissions Office. NOTE: If the College Placement test score indicates that the applicant needs to take Reading 090 (RED 090), this course must be completed before the applicant can be accepted into the Phlebotomy Program.
4. Complete the application form for Phlebotomy Program. (This form may be obtained from the Medical Assisting Department.)
5. An admissions interview will be scheduled by the Medical Assisting/Phlebotomy Department Chairperson.
6. Submit a satisfactory physical examination report from a duly licensed physician, physician assistant, or nurse practitioner indicating physical and emotional status. (Must be current within six months prior to entry into the program.) This form will be mailed with your acceptance letter once you have been accepted into the Phlebotomy Program.
7. Must complete the (series of three) Hepatitis B vaccine. Two of the immunizations must be completed by the first day of class. NOTE: A complete listing of immunization requirements for NC students entering college and programs that have a clinical component is located on the last page of the Phlebotomy Program Application.
8. A minimum grade of "C" (80%) in each PBT course is required to pass the course.
9. Criminal Background Checks and Drug Screening: In order to comply with current Student Affiliation Agreements students accepted into the Phlebotomy Certificate Program will be required to submit a Criminal Background Check and Drug Screening according to Gaston College procedures prior to placement in a clinical facility. The facility reserves the right to deny the student access to the facility. If the student is denied access, the student will not be allowed to complete the program. Completion of clinical experiences is required for the satisfactory completion of the program. More information will be provided upon acceptance into the program.

**NOTE:** All information should be accurate to the best of the applicant’s knowledge. Giving false information or withholding necessary information to the college/program may result in dismissal from the college/program. Questionable situations shall be discussed with the Department Chairperson and the Dean of Health Education.

The Phlebotomy Certificate Program is limited to the number of students matching the number of internship spaces recruited. This usually means that 12-15 students can be accepted. Therefore, the top 12-15 qualifying admission scores will be accepted for program entry. Individuals not accepted must repeat the application process to be considered for admission to the next class.

**SELECTION PROCESS:**

All applicants must meet the admission criteria to be considered for admission. Selection will be conducted by the following method:

Applicants earning the highest Admission Points will be offered acceptance into the program.

- 1. While the ACT score is the only required admission criterion, ADDITIONAL ADMISSION POINTS can be earned from the following categories:
  - a. CPR Certification (current)
  - b. Nursing Assistant I/II Certificate (current)
  - c. College degree/diploma
  - d. College level math course
  - e. College level Anatomy & Physiology course
  - f. PSY 110 or PSY 241
  - g. Previous Applicant
- 2. In the event of a tie, the ACT score with the highest math component will be accepted first.
- 3. In the possible event of a tie for the math component, the English component will become the deciding factor.

**PHLEBOTOMY**

Title			Class	Lab	Clinical	Work	Credits
<b><u>SPRING</u></b>							
PBT	100	Phlebotomy Technology	5	2	0	0	6
PBT	101	Phlebotomy Practicum	0	0	9	0	3
PSY	110	Life Span Development	3	0	0	0	3
<b>Total Semester Hours Credit</b>							<b>12</b>

**NOTE:** The semester sequence for the program will consist of a ten (10) week concentrated classroom experience followed by a six (6) week internship experience. Upon successful completion of PBT 100, PBT 101 and PSY 110, the student will be awarded the Phlebotomy Technician Certificate.

Due to the limited number of internship facilities, the student rotations through clinical facilities may be divided. The internship rotation may consist of two (2) sections, based on need.



If there are more students than internship sites available at the end of the ten (10) week classroom experience, the group will be divided into two (2) sections as listed below:

Students assigned to Section A will complete their Phlebotomy Internship immediately following the ten (10) week concentrated classroom experience.

Students assigned to Section B will complete their Phlebotomy Internship six (6) weeks after the concentrated classroom experience, following Section A.

If all students can be placed in an internship facility for the first rotation (immediately following the ten (10) week concentrated classroom experience), there will be only one Phlebotomy Internship for that year.

**Assignment to a Phlebotomy Internship section is the sole decision of the Phlebotomy faculty.**

THE CLASSROOM/LABORATORY PHASE will concentrate on the courses listed below:

PBT 100: Phlebotomy Technology\* (M,W,F)

PSY 110: Life Span Development\* (T,Th)

\*Classes will meet M-W-F or T-Th between the hours of 8:00 a.m. - 2:00 p.m.

THE INTERNSHIP PHASE will provide the student the opportunity to apply the skills learned in the classroom/ laboratory phase to the work environment, under supervision. Students will be assigned to either an area hospital laboratory, an independent laboratory, a medical clinic, or a physician’s office laboratory for an eight-hour (8-hour) shift, three (3) days a week for a total of twenty-four (24) hours a week clinical experience. Hours for the internship will vary according to the facility to which you will be assigned and may be any of the following sets of hours:

- 6:30 a.m. - 02:30 p.m.
- 7:00 a.m. - 03:00 p.m.
- 8:00 a.m. - 04:00 p.m.
- 8:30 a.m. - 04:30 p.m.
- 2:30 p.m. - 10:30 p.m.
- 3:00 p.m. - 11:00 p.m.

NOTE: In order to participate in the Internship Phase of the Phlebotomy Program, students must pass PBT 100 and must be willing to work any of the internship assignment hours listed. There is no guarantee of “preferred” hours.

# Production Technology

Certificate  
(C40240A)

The Production Technology Certificate curriculum is designed to provide beginning students with the basic knowledge and skills to function effectively in introductory assignments in industry. A core of courses introduces the student to engineering technology and an understanding of production concepts.

The objective of the Production Technology Certificate program is to enhance the training of currently employed manufacturing and service employees in production fundamentals. The objective is fulfilled through the study of courses in engineering graphics, manufacturing processes, industrial safety and leadership.

All courses in the Production Technology Certificate program can be applied to the Associate in Applied Science degree in Industrial Engineering Technology. The certificate program can be completed using either a day or evening sequence.

Title			Class	Lab	Clinical	Work	Credits
Major Courses:							
DFT	170	Engineering Graphics	2	2	0	0	3
EGR	115	Introduction to Technology	2	3	0	0	3
EGR	115A	Intro To Technology Lab	0	3	0	0	1
ISC	112	Industrial Safety	2	0	0	0	2
ISC	128	Industrial Leadership	2	0	0	0	2
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
MEC	145	Manufacturing Materials I	2	3	0	0	3
Total Semester Hour Credits							17



# Quality Engineering Technology

Certificate  
(C40240B)

The Quality Engineering Technology Certificate program is intended to provide the student with a subset of the courses required in the Industrial Engineering Technology associate degree program. These six courses provide the technical and communication skills to meet the needs of manufacturing employees entering product and service quality fields in business and industry.

All courses in the Certificate Program can be applied to the Associate in Applied Science degree in Industrial Engineering Technology.

The program can be completed using either a day or evening sequence.

Title			Class	Lab	Clinical	Work	Credits
Major Courses:							
DFT	170	Engineering Graphics	2	2	0	0	3
ENG	111	Expository Writing	3	0	0	0	3
ISC	132	Manufacturing Quality Control	2	3	0	0	3
ISC	237	Quality Management	2	3	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
MEC	145	Manufacturing Materials I	2	3	0	0	3
Total Semester Hour Credits							18

CERTIFICATE PROGRAMS

Welding Certificate

C50420  
Level I

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the Welding field.

The courses taken in this certificate program count as credit toward the full Welding diploma program.

			Title	Class	Lab	Clinical	Work	Credits
Major Courses:								
BPR	111		Blueprint Reading	1	2	0	0	2
WLD	110		Cutting Processes	1	3	0	0	2
WLD	115		SMAW (Stick) Plate	2	9	0	0	5
WLD	116		SMAW (Stick) Plate/Pipe	1	9	0	0	4
WLD	121		GMAW (MIG) FCAW/Plate	2	6	0	0	4
WLD	131		GTAW (TIG) Plate	2	6	0	0	4
WLD	141		Symbols & Specifications	2	2	0	0	3
WLD	151		Fabrication I	2	6	0	0	4
WLD	261		Certification Practices	1	3	0	0	2

A student may choose any 12 semester credits from the above courses.

Welding Certificate

C50420  
Level II

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the Welding field.

The courses taken in this certificate program count as credit toward the full Welding diploma program.

			Title	Class	Lab	Clinical	Work	Credits
BPR	111		Blueprint Reading	1	2	0	0	2
WLD	110		Cutting Processes	1	3	0	0	2
WLD	115		SMAW (Stick) Plate	2	9	0	0	5
WLD	116		SMAW (Stick) Plate/Pipe	1	9	0	0	4
WLD	121		GMAW (MIG) FCAW/Plate	2	6	0	0	4
WLD	131		GTAW (TIG) Plate	2	6	0	0	4
WLD	141		Symbols & Specifications	2	2	0	0	3
WLD	151		Fabrication I	2	6	0	0	4
WLD	261		Certification Practices	1	3	0	0	2

A student may choose any 24 semester credits from the above courses.





# Gaston College

Opportunities For Life

2006-2008 Gaston College Academic Catalog

## XII. Course Descriptions

### IN THIS SECTION:

Course Descriptions For

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COURSE DESCRIPTIONS

**ACADEMIC RELATED****ACA 111 College Student Success (1-0-1-0)**

Prerequisites: None

Corequisites: None

This course introduces the college's physical, academic, and social environment and promotes the personal development essential for success. Topics include campus facilities and resources; policies, procedures, and programs; study skills; and life management issues such as health, self-esteem, motivation, goal-setting, diversity, and communication. Upon completion, students should be able to function effectively within the college environment to meet their educational objectives. *This course is also available through the Virtual Learning Community (VLC).*

**ACA 118 College Study Skills (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers skills and strategies designed to improve study behaviors. Topics include time management, note taking, test taking, memory techniques, active reading strategies, critical thinking, communication skills, learning styles, and other strategies for effective learning. Upon completion, students should be able to apply appropriate study strategies and techniques to the development of an effective study plan.

**ACCOUNTING****ACC 115 College Accounting (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces basic accounting principles for a sole proprietorship. Topics include the complete accounting cycle with end-of-period statements, bank reconciliation, payrolls, and petty cash. Upon completion, students should be able to demonstrate an understanding of accounting principles and apply those skills to a business organization.

**ACC 120 Prin of Financial Acct (3-2-0-4)**

Prerequisites: MAT 060

Corequisites: None

This course introduces business decision-making using accounting information systems. Emphasis is placed on analyzing, summarizing, reporting, and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision-making and address ethical considerations. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**ACC 121 Prin of Managerial Acct (3-2-0-4)**

Prerequisites: ACC 120

Corequisites: None

This course is a continuation of accounting principles. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting and decision-making. Upon completion, students should be able to analyze and interpret transactions relating to managerial

concepts including product costing systems. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**ACC 122 Principles of Financial Accounting II****(3-0-0-3)**

Prerequisites: ACC 120

Corequisites:

This course provides additional instruction in the financial accounting concepts and procedures introduced in ACC 120. Emphasis is placed on the analysis of specific balance sheet accounts, with in-depth instruction of the accounting principles applied to these accounts. Upon completion, students should be able to analyze data, prepare journal entries, and prepare reports in compliance with generally accepted accounting principles.

**ACC 129 Individual Income Taxes (2-2-0-3)**

Prerequisites: ACC 120

Corequisites: None

This course introduces the relevant laws governing individual income taxation. Topics include tax law, electronic research and methodologies, and the use of technology for preparation of individual tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various individual tax forms.

**ACC 130 Business Income Taxes (2-2-0-3)**

Prerequisites: ACC 129

Corequisites: None

This course introduces the relevant laws governing business and fiduciary income taxes. Topics include tax law relating to business organizations, electronic research and methodologies, and the use of technology for the preparation of business tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various business tax forms.

**ACC 140 Payroll Accounting (1-2-0-2)**

Prerequisites: ACC 115 or ACC 120

Corequisites: None

This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages; calculating social security, income, and unemployment taxes; preparing appropriate payroll tax forms; and journalizing/posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries using appropriate technology.

**ACC 149 Intro to Acct. Spreadsheets (1-2-0-2)**

Prerequisites: ACC 115 or ACC 120

Corequisites: None

This course provides a working knowledge of computer spreadsheets and their use in accounting. Topics include pre-programmed problems, modelbuilding problems, beginning-level



macros, graphics, and what-if analysis enhancements of template problems. Upon completion, students should be able to use a computer spreadsheet to complete many of the tasks required in accounting.

**ACC 150 Accounting Software Applications (1-2-0-2)**

Prerequisites: ACC 115 or ACC 120

Corequisites: None

This course introduces computer applications related to accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting software package to solve accounting problems.

**ACC 151 Acct Spreadsheet Appl (1-2-0-2)**

Prerequisites: ACC 149

Corequisites: None

This course is designed to facilitate the use of spreadsheet technology as applied to accounting principles. Emphasis is placed on using spreadsheet software as a problem-solving and decision-making tool. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

**ACC 220 Intermediate Accounting I (3-2-0-4)**

Prerequisites: ACC 121

Corequisites: None

This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and extensive analyses of financial statements. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards.

**ACC 221 Intermediate Acct II (3-2-0-4)**

Prerequisites: ACC 220

Corequisites: None

This course is a continuation of ACC 220. Emphasis is placed on special problems which may include leases, bonds, investments, ratio analyses, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

**ACC 225 Cost Accounting (3-0-0-3)**

Prerequisites: ACC 121

Corequisites: None

This course introduces the nature and purposes of cost accounting as an information system for planning and control. Topics include direct materials, direct labor, factory overhead, process, job order, and standard cost systems. Upon completion, students should be able to demonstrate an

understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

**ACC 240 Gov & Not-for-Profit Acct (3-0-0-3)**

Prerequisites: ACC 121

Co-requisites: None

This course introduces principles and procedures applicable to governmental and not-for-profit organizations. Emphasis is placed on various budgetary accounting procedures and fund accounting. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

**ACC 269 Audit & Assurance Services (3-0-0-3)**

Prerequisites: ACC 220

Corequisites: None

This course introduces selected topics pertaining to the objectives, theory and practices in engagement providing auditing and other assurance services. Topics will include planning, conducting and reporting, with emphasis on the related professional ethics and standards. Upon completion, students should be able to demonstrate an understanding of the types of professional services, the related professional standards, and engagement methodology.

**AIR CONDITIONING, HEATING AND REFRIGERATION**

(Also see Electrical Installation and Maintenance ELC)

**AHR 110 Intro, to Refrigeration (2-6-0-5)**

Prerequisites: None

Corequisites: None

This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

**AHR 112 Heating Technology (2-4-0-4)**

Prerequisites: None

Corequisites: None

This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.



# COURSE DESCRIPTIONS

## **AHR 113 Comfort Cooling (2-4-0-4)**

Prerequisites: None

Corequisites: None

This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychometrics, manufacturer specifications, and test instruments to determine proper system operation.

## **AHR 114 Heat Pump Technology (2-4-0-4)**

Prerequisites: AHR 110, AHR 113

Corequisites: None

This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures.

## **AHR 120 HVACR Maintenance (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the basic principles of industrial air conditioning and heating systems. Emphasis is placed on preventive maintenance procedures for heating and cooling equipment and related components. Upon completion, students should be able to perform routine preventive maintenance tasks, maintain records, and assist in routine equipment repairs.

## **AHR 130 HVAC Controls (2-2-0-3)**

Prerequisites: AHR 111, ELC 111

Corequisites: None

This course covers the types of controls found in residential and commercial comfort systems. Topics include electrical and electronic controls, control schematics and diagrams, test instruments, and analysis and troubleshooting of electrical systems. Upon completion, students should be able to diagnose and repair common residential and commercial comfort system controls.

## **AHR 133 HVAC Servicing (2-6-0-4)**

Prerequisites: None

Corequisites: AHR 112, AHR 113

The course covers the maintenance and servicing of HVAC equipment. Topics include testing, adjusting, maintaining, and troubleshooting HVAC equipment and record keeping. Upon completion, students should be able to adjust, maintain, and service HVAC equipment.

## **AHR 140 All-Weather Systems (1-3-0-2)**

Prerequisites: AHR 112, AHR 113

Corequisites: None

This course covers the principles of combination heating and cooling systems including gas-electric, all-electric, and oil-electric systems. Topics include PTAC's and package and split-system units. Upon completion, students should be able to understand systems performance and perform routine maintenance procedures.

## **AHR 160 Refrigerant Certification (1-0-0-1)**

Prerequisites: None

Corequisites: None

This course covers the requirements for the EPA certification examinations. Topics include small appliances, high pressure systems, and low pressure systems. Upon completion, students should be able to demonstrate knowledge of refrigerants and be prepared for the EPA certification examinations.

## **AHR 211 Residential System Design (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the principles and concepts of conventional residential heating and cooling system design. Topics include heating and cooling load estimating, basic psychometrics, equipment selection, duct system selection, and system design. Upon completion, students should be able to design a basic residential heating and cooling system.

## **AHR 215 Commercial HVAC Controls (1-3-0-2)**

Prerequisites: AHR 111, ELC 111

Corequisites: None

This course introduces HVAC control systems used in commercial applications. Topics include electric/ electronic control systems, pneumatic control systems, DDC temperature sensors, humidity sensors, pressure sensors, wiring, controllers, actuators, and controlled devices. Upon completion, students should be able to verify or correct the performance of common control systems with regard to sequence of operation and safety.

## **ANTHROPOLOGY**

### **ANT 210 General Anthropology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the physical, archaeological, linguistic, and ethnological fields of anthropology. Topics include human origins, genetic variations, archaeology, linguistics, primatology, and contemporary cultures. Upon completion, students should be able to demonstrate an understanding of the four major fields of anthropology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.*

### **ANT 220 Cultural Anthropology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the nature of human culture. Emphasis is placed on cultural theory, methods of fieldwork, and cross-cultural comparisons in the areas of ethnology, language, and the cultural past. Upon completion, students should be able to demonstrate an understanding of basic cultural processes and how cultural data are collected and analyzed. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*



**ANT 221 Comparative Cultures (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an ethnographic survey of societies around the world covering their distinctive cultural characteristics and how these relate to cultural change. Emphasis is placed on the similarities and differences in social institutions such as family, economics, politics, education, and religion. Upon completion, students should be able to demonstrate knowledge of a variety of cultural adaptive strategies. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**ANT 230 Physical Anthropology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the scientific study of human evolution and adaptation. Emphasis is placed on evolutionary theory, population genetics, biocultural adaptation and human variation, as well as non-human primate evolution, morphology, and behavior. Upon completion, students should be able to demonstrate an understanding of the biological and cultural processes which have resulted in the formation of the human species. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.*

**ANT 230A Physical Anthropology Lab (0-2-0-1)**

Prerequisites: None

Corequisites: ANT 230

This course provides laboratory work that reinforces the material presented in ANT 230. Emphasis is placed on laboratory exercises which may include fossil identification, genetic analysis, skeletal comparisons, forensics, computer simulations, and field observations. Upon completion, students should be able to demonstrate an understanding of the analytical skills employed by anthropologists in the study of primate evolution and variation. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**ANT 240 Archaeology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the scientific study of the unwritten record of the human past. Emphasis is placed on the process of human cultural evolution as revealed through archaeological methods of excavation and interpretation. Upon completion, students should be able to demonstrate an understanding of how archaeologists reconstruct the past and describe the variety of past human cultures. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**ARCHITECTURE****ARC 111 Intro to Arch Technology (1-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces basic architectural drafting techniques, lettering, use of architectural and engineer scales, and sketching. Topics include orthographic, axonometric, and oblique drawing techniques using architectural plans, elevations, sections, and details; reprographic techniques; and other related topics. Upon completion, students should be able to prepare and print scaled drawings within minimum architectural standards.

**ARC 112 Constr Matls & Methods (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces construction materials and their methodologies. Topics include construction terminology, materials and their properties, manufacturing processes, construction techniques, and other related topics. Upon completion, students should be able to detail construction assemblies and identify construction materials and properties.

**ARC 113 Residential Arch Tech (1-6-0-3)**

Prerequisites: ARC 111

Corequisites: ARC 112

This course covers intermediate residential working drawings. Topics include residential plans, elevations, sections, details, schedules, and other related topics. Upon completion, students should be able to prepare a set of residential working drawings that are within accepted architectural standards.

**ARC 114 Architectural CAD (1-3-0-2)**

Prerequisites: ARC 111

Corequisites: None

This course introduces basic architectural CAD techniques. Topics include basic commands and system hardware and software. Upon completion, students should be able to prepare and plot architectural drawings to scale within accepted architectural standards.

**ARC 119 Structural Drafting (2-2-0-3)**

Prerequisites: ARC 113, MAT 121

Corequisites: None

This course introduces basic concepts associated with sizing and detailing structural assemblies. Topics include vocabulary, span-to-depth ratios, code requirements, shop drawings, and other related topics. Upon completion, students should be able to perform simple calculations and prepare shop drawings and preliminary structural plans.

**ARC 131 Building Codes (2-2-0-3)**

Prerequisites: ARC 112

Corequisites: None

This course covers the methods of researching building codes for specific projects. Topics include residential and commercial building codes. Upon completion, students should be able



to determine the code constraints governing residential and commercial projects.

**ARC 141 Elem Structures for Arch (4-0-0-4)**

Prerequisites: ARC 111, MAT 121

Corequisites: None

This course covers concepts of elementary structures in architecture. Topics include structural form, statics, strength of materials, structural behavior, and the relationship between structures and architectural form. Upon completion, students should be able to size simple structural elements.

**ARC 211 Light Constr Technology (1-6-0-3)**

Prerequisites: ARC 111

Corequisites: ARC 112

This course covers working drawings for light construction. Topics include plans, elevations, sections, and details; schedules; and other related topics. Upon completion, students should be able to prepare a set of working drawings which are within accepted architectural standards.

**ARC 213 Design Project (2-6-0-4)**

Prerequisites: ARC 114, ARC 211

Corequisites: None

This course provides the opportunity to design and prepare a set of contract documents within an architectural setting. Topics include schematic design, design development, construction documents, and other related topics. Upon completion, students should be able to prepare a set of commercial contract documents.

**ARC 220 Adv Architect CAD (1-3-0-2)**

Prerequisites: ARC 114

Corequisites: None

This course provides file management, productivity, and CAD customization skills. Emphasis is placed on developing advanced proficiency techniques. Upon completion, students should be able to create prototype drawings and symbol libraries, compose sheets with multiple details, and use advanced drawing and editing commands.

**ARC 221 Architectural 3-D CAD (1-4-0-3)**

Prerequisites: ARC 114

Corequisites: None

This course introduces architectural three dimensional CAD applications. Topics include three-dimensional drawing, coordinate systems, viewing, rendering, modeling, and output options. Upon completion, students should be able to prepare architectural three-dimensional drawings and renderings.

**ARC 230 Environmental Systems (3-3-0-4)**

Prerequisites: ARC 111, MAT 121

Corequisites: None

This course introduces plumbing, mechanical (HVAC), and electrical systems for the architectural environment. Topics include basic plumbing, mechanical, and electrical systems for residential and/or commercial buildings with an introduction to selected code requirements. Upon completion, students should be able to develop

schematic drawings for plumbing, mechanical, and electrical systems and perform related calculations.

**ARC 241 Contract Administration (1-2-0-2)**

Prerequisites: ARC 111, ARC 112

Corequisites: None

This course covers the techniques for reviewing the progress of construction projects. Topics include site observations, field reports, applications for payment, change orders, and other related topics. Upon completion, students should be able to review construction progress and produce appropriate documentation.

**ART**

**ART 111 Art Appreciation (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. Art majors will not receive credit for taking this class. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*

**ART 114 Art History Survey I (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*

**ART 115 Art History Survey II (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community. (VLC).*



**ART 116 Survey of American Art (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers the development of American art forms from colonial times to the present. Emphasis is placed on architecture, painting, sculpture, graphics, and the decorative arts. Upon completion, students should be able to demonstrate understanding of the history of the American creative experience. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**ART 117 Non-Western Art History (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces non-Western cultural perspectives. Emphasis is placed on, but not limited to, African, Oriental, and Oceanic art forms throughout history. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of non Western social and cultural development. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**ART 121 Design I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the elements and principles of design as applied to two-dimensional art. Emphasis is placed on the structural elements, the principles of visual organization, and the theories of color mixing and interaction. Upon completion, students should be able to understand and use critical and analytical approaches as they apply to two-dimensional visual art. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement*

**ART 122 Design II (0-6-0-3)**

Prerequisites: ART 121

Corequisites: None

This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply three dimensional design concepts. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 131 Drawing I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes. *This course has been approved to satisfy the Comprehensive*

*Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 132 Drawing II (0-6-0-3)**

Prerequisites: ART 131

Corequisites: None

This course continues instruction in the language of drawing and the use of various materials. Emphasis is placed on experimentation in the use of drawing techniques, media, and graphic materials. Upon completion, students should be able to demonstrate increased competence in the expressive use of graphic form and techniques. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 135 Figure Drawing I (0-6-0-3)**

Prerequisites: ART 131

Corequisites: None

This course introduces rendering the human figure with various drawing materials. Emphasis is placed on the use of the visual elements, anatomy, and proportion in the representation of the draped and undraped figure. Upon completion, students should be able to demonstrate competence in drawing the human figure. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 171 Computer Art I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the use of the computer as a tool for solving visual problems. Emphasis is placed on fundamentals of computer literacy and design through bit-mapped image manipulation. Upon completion, students should be able to demonstrate an understanding of paint programs, printers, and scanners to capture, manipulate, and output images. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 212 Gallery Assistantship I (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course covers the practical application of display techniques. Emphasis is placed on preparation of artwork for installation, hardware systems, and exhibition graphics. Upon completion, students should be able to demonstrate basic gallery exhibition skills. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 213 Gallery Assistantship II (0-2-0-1)**

Prerequisites: ART 212

Corequisites: None

This course provides additional experience in display techniques. Emphasis is placed on preparation of artwork for exhibition, alternative methods of installation, hardware systems, and exhibition graphics. Upon completion, students should be able to demonstrate independent



decision-making and exhibition expertise. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

#### **ART 214 Portfolio and Resume (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course covers resume writing, interview skills, and the preparation and presentation of an art portfolio. Emphasis is placed on the preparation of a portfolio of original artwork, the preparation of a photographic portfolio, approaches to resume writing, and interview techniques. Upon completion, students should be able to mount original art for portfolio presentation, photograph and display a professional slide portfolio, and write an effective resume. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

#### **ART 222 Wood Design I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the historical and contemporary design concepts and their application to the construction of functional and sculptural wood forms. Emphasis is placed on the mastery of hand and power tools. Upon completion, students should be able to demonstrate appropriate use of tools to create unique designs. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

#### **ART 223 Wood Design (0-6-0-3)**

Prerequisites: ART 222

Corequisites: None

This course provides a continuation of the skills and techniques used in ART 222. Emphasis is placed on woodcarving and other processes. Upon completion, students should be able to use original designs in the creation of functional and sculptural forms. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

#### **ART 231 Printmaking I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces printmaking: its history, development techniques, and processes. Emphasis is placed on basic applications with investigation into image source and development. Upon completion, students should be able to produce printed images utilizing a variety of methods. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

#### **ART 232 Printmaking II (0-6-0-3)**

Prerequisites: ART 231

Corequisites: None

This course includes additional methods and printmaking processes. Emphasis is placed on the

printed image as related to method, source, and concept. Upon completion, students should be able to produce expressive images utilizing both traditional and innovative methods. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

#### **ART 240 Painting I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the language of painting and the use of various painting materials. Emphasis is placed on the understanding and use of various painting techniques, media, and color principles. Upon completion, students should be able to demonstrate competence in the use of creative processes directed toward the development of expressive form. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

#### **ART 241 Painting II (0-6-0-3)**

Prerequisites: ART 240

Corequisites: None

This course provides a continuing investigation of the materials, processes, and techniques of painting. Emphasis is placed on the exploration of expressive content using a variety of creative processes. Upon completion, students should be able to demonstrate competence in the expanded use of form and variety. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

#### **ART 244 Watercolor (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces basic methods and techniques used in watercolor. Emphasis is placed on application, materials, content, and individual expression. Upon completion, students should be able to demonstrate a variety of traditional and nontraditional concepts used in watercolor media. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

#### **ART 247 Jewelry I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces a basic understanding of the design and production of jewelry. Emphasis is placed on concepts and techniques using metals and other materials. Upon completion, students should be able to demonstrate an ability to use appropriate methods to create unique jewelry. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*



**ART 248 Jewelry II (0-6-0-3)**

Prerequisites: ART 247

Corequisites: None

This course is a continuation of the skills learned in ART 247. Emphasis is placed on the creation of individual designs that utilize a variety of techniques such as casting, cloisonne, and plique a-jour. Upon completion, students should be able to create jewelry which demonstrates originality. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 250 Surface Design: Textiles (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the basic principles and elements of art as applied to textile surfaces. Emphasis is placed on direct, top-dyed processes that utilize both synthetic and natural dyes, and techniques such as batik, stenciling, and stamping. Upon completion, students should be able to demonstrate a basic understanding of appropriate materials and techniques as they apply to original design on a variety of textile surfaces. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 260 Photography Appreciation (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the origins and historical development of photography. Emphasis is placed on the study of composition and history of photography as an art form. Upon completion, students should be able to recognize and produce, using color transparencies, properly exposed, well-composed photographs. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 261 Photography I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces photographic equipment, theory, and processes. Emphasis is placed on camera operation, composition, darkroom technique, and creative expression. Upon completion, students should be able to successfully expose, develop, and print a well-conceived composition. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 262 Photography II (0-6-0-3)**

Prerequisites: ART 261

Corequisites: None

This course introduces the creative manipulation of alternative photographic materials and processes such as toning, hand coloring, infrared, and multiple exposure. Emphasis is placed on

personal vision and modes of seeing. Upon completion, students should be able to create properly exposed images using a variety of photographic materials and processes. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 271 Computer Art II (0-6-0-3)**

Prerequisites: None

Corequisites: Art 171

This course includes advanced computer imaging techniques. Emphasis is placed on creative applications of digital technology. Upon completion, students should be able to demonstrate command of computer systems and applications to express their personal vision. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 275 Intro to Commercial Art (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the materials and techniques used in creative layout design for publication. Emphasis is placed on design for advertising in a variety of techniques and media including computer graphics. Upon completion, students should be able to demonstrate competence in manual camera ready layout design and computer graphics literacy. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 281 Sculpture I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course provides an exploration of the creative and technical methods of sculpture with focus on the traditional processes. Emphasis is placed on developing basic skills as they pertain to three dimensional expression in various media. Upon completion, students should be able to show competence in variety of sculptural approaches. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 282 Sculpture II (0-6-0-3)**

Prerequisites: ART 281

Corequisites: None

This course builds on the visual and technical skills learned in ART 281. Emphasis is placed on developing original solutions to sculptural problems in a variety of media. Upon completion, students should be able to express individual ideas using the techniques and materials of sculpture. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*



**ART 283 Ceramics I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course provides an introduction to three dimensional design principles using the medium of clay. Emphasis is placed on fundamentals of forming, surface design, glaze application, and firing. Upon completion, students should be able to demonstrate skills in slab and coil construction, simple wheel forms, glaze technique, and creative expression. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 284 Ceramics II (0-6-0-3)**

Prerequisites: ART 283

Corequisites: None

This course covers advanced hand building and wheel techniques. Emphasis is placed on creative expression, surface design, sculptural quality, and glaze effect. Upon completion, students should be able to demonstrate a high level of technical competence in forming and glazing with a development of three-dimensional awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 285 Ceramics III (0-6-0-3)**

Prerequisites: ART 284

Corequisites: None

This course provides the opportunity for advanced self-determined work in sculptural and functional ceramics. Emphasis is placed on developing the technical awareness of clay bodies, slips, engobes, and firing procedures necessary to fulfill the student's artistic goals. Upon completion, students should be able to demonstrate a knowledge of materials and techniques necessary to successfully create original projects in the clay medium. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 286 Ceramics IV (0-6-0-3)**

Prerequisites: ART 285

Corequisites: None

This course provides the opportunity for self determined work in sculptural and functional ceramics. Emphasis is placed on developing the technical awareness of glaze materials, glaze formulation, and firing techniques necessary to fulfill the student's artistic goals. Upon completion, students should be able to demonstrate knowledge of materials and techniques necessary to successfully create original projects in the clay medium. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ART 288 Studio (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course provides the opportunity for advanced self-determined work beyond the limits of regular studio course sequences. Emphasis is placed on creative self-expression and in-depth exploration of techniques and materials. Upon completion, students should be able to create original projects specific to media, materials, and techniques. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ASTRONOMY****AST 111 Descriptive Astronomy (3-0-0-3)**

Prerequisites: MAT 070 and RED 090

Corequisites: AST 111A

This course introduces an overall view of modern astronomy. Topics include an overview of the solar system, the sun, stars, galaxies, and the larger universe. Upon completion, students should be able to demonstrate an understanding of the universe around them. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**AST 111A Descriptive Astronomy Lab (0-2-0-1)**

Prerequisites: None

Corequisites: AST 111

The course is a laboratory to accompany AST 111. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 111 and which provide practical experience. Upon completion, students should be able to demonstrate an understanding of the universe around them. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**AUTOMATION TRAINING****ATR 112 Intro to Automation (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the basic principles of automated manufacturing and describes the tasks that technicians perform on the job. Topics include the history, development, and current applications of robots and automated systems including their configuration, operation, components, and controls. Upon completion, students should be able to understand the basic concepts of automation and robotic systems. Additional topics include automated assembly systems and production economics.

**ATR 211 Robot Programming (2-3-0-3)**

Prerequisites: ATR 112 and CSC 129

Corequisites: None

This course provides the operational characteristics of industrial robots and programming in their



respective languages. Topics include robot programming utilizing teach pendants, PLCs, and personal computers; and the interaction of external sensors, machine vision, network systems, and other related devices. Upon completion, students should be able to program and demonstrate the operation of various robots. Additional topics include artificial intelligence simulation and offline programming.

## **AUTOMOTIVE TECHNOLOGY**

### **AUT 110 Intro to Auto Technology (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course covers the basic concepts and terms of automotive technology, workplace safety, North Carolina state inspection, safety and environmental regulations, and use of service information resources. Topics include familiarization with components along with identification and proper use of various automotive hand and power tools. Upon completion, students should be able to describe terms associated with automobiles, identify and use basic tools and shop equipment, and conduct North Carolina safety/emissions inspections.

### **AUT 113 Automotive Servicing (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course covers diagnostic procedures necessary to determine the nature and cause of auto service problems and the procedures used to repair/replace components. Emphasis is placed on troubleshooting, testing, adjusting, repairing, and replacing components using appropriate test equipment and service information. Upon completion, students should be able to perform a variety of automotive repairs using proper service procedures and operate appropriate equipment.

### **AUT 115 Engine Fundamentals (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis/repair of automotive engines using appropriate tools, equipment, procedures, and service information.

### **AUT 116 Engine Repair (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course covers service/repair/rebuilding of block, head, and internal engine components. Topics include engine repair/reconditioning using service specifications. Upon completion, students should be able to rebuild/recondition an automobile engine to service specifications.

### **AUT 141 Suspension & Steering System (2-4-0-4)**

Prerequisites: None

Corequisites: None

This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair various steering and suspension components, check and adjust various alignment angles, and balance wheels.

### **AUT 151 Brake Systems (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

### **AUT 152 Brake Systems Lab (0-2-0-1)**

Prerequisites: None

Corequisites: AUT 151

This course provides a laboratory setting to enhance brake system skills. Emphasis is placed on practical experiences that enhance the topics presented in AUT 151. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 151.

### **AUT 161 Electrical Systems (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course covers basic electrical theory and wiring diagrams, test equipment, and diagnosis/repair/replacement of batteries, starters, alternators, and basic electrical accessories. Topics include diagnosis and repair of battery, starting, charging, lighting, and basic accessory systems problems. Upon completion, students should be able to diagnose, test, and repair the basic electrical components of an automobile.

### **AUT 164 Automotive Electronics (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course covers fundamentals of electrical/electronic circuitry, semi-conductors, and microprocessors. Topics include Ohm's law, circuits, AC/DC current, solid state components, digital applications, and the use of digital multimeters. Upon completion, students should be able to apply Ohm's law to diagnose and repair electrical/electronic circuits using digital multimeters and appropriate service information.



**AUT 171 Heating & Air Conditioning (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis/repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.

**AUT 181 Engine Performance Electrical (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers the principles, systems, and procedures required for diagnosing and restoring engine performance using electrical/electronics test equipment. Topics include procedures for diagnosis and repair of ignition, emission control, and related electronic systems. Upon completion, students should be able to describe operation of and diagnose/repair ignition/emission control systems using appropriate test equipment and service information.

**AUT 182 Engine Perfor-Elec Lab (0-3-0-1)**

Prerequisites: None

Corequisites: AUT 181

This course provides a laboratory setting to enhance the skills for diagnosing and restoring engine performance using electrical/electronics test equipment. Emphasis is placed on practical experiences that enhance the topics presented in AUT 181. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 181.

**AUT 183 Engine Performance-Fuels (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers the principles of fuel delivery/management, exhaust/emission systems, and procedures for diagnosing and restoring engine performance using appropriate test equipment. Topics include procedures for diagnosis/repair of fuel delivery/management and exhaust/emission systems using appropriate service information. Upon completion, students should be able to describe, diagnose, and repair engine fuel delivery/management and emission control systems using appropriate service information and diagnostic equipment.

**AUT 184 Engine Perfor-Fuels Lab (0-3-0-1)**

Prerequisites: None

Corequisites: AUT 183

This course provides a laboratory setting to enhance the skills for diagnosing and repairing fuel delivery/management and emission systems. Emphasis is placed on practical experiences that enhance the topics presented in AUT 183. Upon completion, students should be able to

apply the laboratory experiences to the concepts presented in AUT 183.

**AUT 185 Emission Controls (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers the design and function of emission control devices. Topics include chemistry of combustion as well as design characteristics and emission control devices which limit tailpipe, crankcase, and evaporative emissions. Upon completion, students should be able to troubleshoot, test, and service emission control systems.

**AUT 221 Automatic Transmissions (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course covers operation, diagnosis, service, and repair of automatic transmissions/transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair automatic drive trains.

**AUT 231 Manual Drive Trains/Axles (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers the operation, diagnosis, and repair of manual transmissions/transaxles, clutches, drive shafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair manual drive trains.

**AUT 232 Manual Drive Trains/Axles Lab (0-3-0-1)**

Prerequisites: None

Corequisites: AUT 231

This course provides a laboratory setting to enhance the skills for diagnosing and repairing manual transmissions/transaxles, clutches, drive shafts, axles, and final drives. Emphasis is placed on practical experiences that enhance the topics presented in AUT 231. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 231.

**BANKING AND FINANCE****BAF 143 Financial Planning (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the perspectives, principles, and practices of financial planning. Topics include investment, retirement, tax, and estate planning. Upon completion, students should be able to understand the process that looks at a customer's financial picture and recommend strategies to achieve the customer's objectives.



## BIOLOGY

### **BIO 110 Principles of Biology (3-3-0-4)**

Prerequisites: RED 090 and SCI 090 or departmental approval or appropriate test scores

Corequisites: None

This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, taxonomy, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

### **BIO 111 General Biology I (3-3-0-4)**

Prerequisites: RED 090 and SCI 090 or departmental approval or appropriate test scores

Corequisites: None

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

### **BIO 112 General Biology II (3-3-0-4)**

Prerequisites: BIO 111

Corequisites: None

This course is a continuation of BIO 111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

### **BIO 120 Introductory Botany (3-3-0-4)**

Prerequisites: BIO 110 or BIO 111

Corequisites: None

This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non-seed plants. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

### **BIO 130 Introductory Zoology (3-3-0-4)**

Prerequisites: BIO 110 or BIO 111

Corequisites: None

This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is placed on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

### **BIO 140 Environmental Biology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. This course is also available through the Virtual Learning Community (VLC).*

### **BIO 140A Environmental Biology Lab (0-3-0-1)**

Prerequisites: None

Corequisites: BIO 140

This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

### **BIO 146 Regional Natural History (3-3-0-4)**

Prerequisites: RED 090

Corequisites: None

This course is an interdisciplinary and historical analysis of the natural resources of the region. Emphasis is placed on geology, climate, forest systems, watersheds, water resources, and fish and wildlife resources of the region. Upon completion, students should be able to demonstrate comprehension of the natural history and the integration of the natural resources of the region. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

# COURSE DESCRIPTIONS



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**BIO 150 Genetics in Human Affairs (3-0-0-3)**  
 Prerequisites: BIO 110 or BIO 111  
 Corequisites: None  
 This course describes the importance of genetics in everyday life. Topics include the role of genetics in human development, birth defects, cancer and chemical exposure, and current issues including genetic engineering and fertilization methods. Upon completion, students should be able to understand the relationship of genetics to society today and its possible influence on our future. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**BIO 155 Nutrition (3-0-0-3)**  
 Prerequisites: RED 090  
 Corequisites: None  
 This course covers the biochemistry of foods and nutrients with consideration of the physiological effects of specialized diets for specific biological needs. Topics include cultural, religious, and economic factors that influence a person's acceptance of food as well as nutrient requirements of the various life stages. Upon completion, students should be able to identify the functions and sources of nutrients, the mechanisms of digestion, and the nutritional requirements of all age groups. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**BIO 163 Basic Anat & Physiology (4-2-0-5)**  
 Prerequisites: RED 090 and SCI 090 or departmental approval or appropriate test scores  
 Corequisites: None  
 This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**BIO 165 Anatomy and Physiology I (3-3-0-4)**  
 Prerequisites: RED 090  
 Corequisites: None  
 This course is the first of a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. *This course has been approved for transfer through the Comprehensive Articulation Agreement. This course is also available through the Virtual Learning Community (VLC).*

**BIO 166 Anatomy and Physiology II (3-3-0-4)**  
 Prerequisites: BIO 165  
 Corequisites: None  
 This course is the second in a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and the interrelationships of all body systems. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**BIO 168 Anatomy and Physiology I (3-3-0-4)**  
 Prerequisites: RED 090 and SCI 090 or departmental approval or appropriate test scores  
 Corequisites: None  
 This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, nervous and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**BIO 169 Anatomy and Physiology II (3-3-0-4)**  
 Prerequisites: BIO 168  
 Corequisites: None  
 This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**BIO 175 General Microbiology (2-2-0-3)**  
 Prerequisites: BIO I 10 or BIO I 11 or BIO 163 or BIO 166 or BIO 169  
 Corequisites: None  
 This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*



**BIO 250 Genetics (3-3-0-4)**

Prerequisites: None

Corequisites: None

This course covers principles of prokaryotic and eukaryotic cell genetics. Emphasis is placed on the molecular basis of heredity, chromosome structure, patterns of Mendelian and non-Mendelian inheritance, evolution, and biotechnological applications. Upon completion, students should be able to recognize and describe genetic phenomena and demonstrate knowledge of important genetic principles. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

**BIO 271 Pathophysiology (3-0-0-3)**

Prerequisites: BIO 163 or BIO 166 or BIO 169

Corequisites: None

This course provides an in-depth study of human pathological processes and their effects on homeostasis. Emphasis is placed on interrelationships among organ systems in deviations from homeostasis. Upon completion, students should be able to demonstrate a detailed knowledge of pathophysiology. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**BIO 275 Microbiology (3-3-0-4)**

Prerequisites: BIO 110 or BIO 111 or BIO 163 or BIO 165 or BIO 168

Corequisites: None

This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**BIO 280 Biotechnology (2-3-0-3)**

Prerequisites: BIO 111 or CHM 151

Corequisites: None

This course provides experience in selected laboratory procedures. Topics include proper laboratory techniques in biology and chemistry. Upon completion, students should be able to identify laboratory techniques and instrumentation in basic biotechnology. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

**BIO 293 Selected Topics in Biology (3-3-0-3)**

Prerequisite: None

Corequisite: None

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to

demonstrate an understanding of the specific area of study.

**BIOPROCESS MANUFACTURING TECHNOLOGY****BPM 110 Bioprocess Practices (3-4-0-5)**

Prerequisites: None

Corequisites: None

This course provides a study of plant operations including various plant utility systems and detailed study of the varied plant environments in a bioprocessing facility. Emphasis is placed on quality mindset and principles of validation through applications of monitoring procedures. Upon completion, students should be able to demonstrate the rigors of industry regulation and its necessity.

**BLUEPRINT READING****BPR 111 Blueprint Reading (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the basic principles of blueprint reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic blueprints and visualize the features of a part.

**BPR 121 Blueprint Reading: Mech (1-2-0-2)**

Prerequisites: BPR 111

Corequisites: None

This course covers the interpretation of intermediate blueprints. Topics include tolerancing, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret a mechanical working drawing.

**BPR 130 Blueprint Reading/Const (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers the interpretation of blueprints and specifications that are associated with the construction trades. Emphasis is placed on interpretation of details for foundations, floor plans, elevations, and schedules. Upon completion, students should be able to read and interpret a set of construction blueprints.

**BOTANY - See Biology****BROADCASTING****BPT 110 Intro to Broadcasting (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the field of broadcasting and other electronic media. Emphasis is placed on the history, development, and current status of radio, television, and related industries. Upon completion, students should be able to demonstrate knowledge of regulations, organizational structure, revenue sources, historical development, and on-going operation of broadcasting and related industries.



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## **BPT 111 Broadcast Law & Ethics (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers judicial, legislative, and administrative policies pertinent to the ethical and legal operation of broadcast and other electronic media organizations. Emphasis is placed on legal and ethical issues including First Amendment protection, FCC regulations, copyright, and libel laws. Upon completion, students should be able to demonstrate an understanding of the historical significance and modern-day application of important broadcast laws and policies.

## **BPT 112 Broadcast Writing (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces proper copy and script writing techniques and formats for radio, television, and other electronic media. Emphasis is placed on creating effective scripts for programs and promotional materials, including commercial and public radio service announcements for a specific target audience. Upon completion, students should be able to understand and write copy and scripts according to standard industry formats.

## **BPT 113 Broadcast Sales (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers sales principles applicable to radio, television, cable, and other electronic media. Emphasis is placed on prospecting and servicing accounts, developing clients, and preparing sales presentations. Upon completion, students should be able to create a sales presentation based upon standard ratings reports, prospect for new customers, and understand account management.

## **BPT 115 Public Relations (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the art and science of analyzing trends, predicting their consequences, counseling organizations, and implementing actions to serve organizational and public interests. Emphasis is placed on identifying public needs, conducting and analyzing research, writing and communicating information, maintaining media relations, and creating an organizational crisis plan. Upon completion, students should be able to summarize public relations history, conduct research, develop press releases, create printed material, and formulate a crisis plan.

## **BPT 121 Broadcast Speech I (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers basic preparation and performance of on-air talents' speaking quality. Emphasis is placed on developing a pleasant and efficient voice with techniques applied to taped news, features, commercial copy, and announcing. Upon completion, students should be able to show improvement and aptitude in proper articulation, pronunciation, rate of delivery, pitch,

breathing techniques, inflection, projection, and phrasing.

## **BPT 122 Broadcast Speech II (2-3-0-3)**

Prerequisites: BPT 121

Corequisites: None

This course covers basic and advanced preparation and performance of on-air speech. Emphasis is placed on enhancing a pleasant, effective voice with techniques applied to impromptu speaking, radio plays, and taped presentations. Upon completion, students should be able to employ proper articulation, pronunciation, rate of delivery, phrasing, and other voice techniques in a professional manner.

## **BPT 131 Audio/Radio Production I (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course covers the creation, development, production, and presentation of audio programming elements for broadcast and/or other electronic media applications. Emphasis is placed on the proper operation of professional audio equipment and the study of basic physical behavior and perceptual effects of sound. Upon completion, students should be able to correctly operate audio recording and playback equipment and demonstrate an understanding of the basic components of sound.

## **BPT 132 Audio/Radio Production II (2-6-0-4)**

Prerequisites: BPT 131

Corequisites: None

This course covers the use of advanced audio production techniques in broadcast and/or other electronic media applications. Topics include basic audio signal processing equipment and analog and digital professional audio recording and playback equipment. Upon completion, students should be able to optimize the use of professional audio equipment in the production of effective audio programming.

## **BPT 135 Radio Performance I (0-6-0-2)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to operate the college radio station as an announcer/board operator. Emphasis is placed on operating control-room equipment, logging transmitter readings, EBS tests, reading news, and broadcasting free of interruptions. Upon completion, students should be able to prepare music, public service announcements, and promos for timely broadcast; introduce songs/programs smoothly; and follow FCC rules.

## **BPT 136 Radio Performance II (0-6-0-2)**

Prerequisites: BPT 135

Corequisites: None

This course provides an opportunity to operate the college radio station as an announcer/board operator. Emphasis is placed on operating control-room equipment, logging transmitter readings, EBS tests, reading news, and broadcasting free of interruptions. Upon completion, students



should be able to prepare music, public service announcements, and promos for timely broadcast; introduce songs/programs smoothly; and follow FCC rules.

### **BPT 137 Radio Performance III (0-6-0-2)**

Prerequisites: BPT 136

Corequisites: None

This course provides an opportunity to operate the college radio station as an announcer/board operator. Emphasis is placed on operating control-room equipment, logging transmitter readings, EBS tests, reading news, and broadcasting free of interruptions. Upon completion, students should be able to prepare music, public service announcements, and promos for timely broadcast; introduce songs/programs smoothly; and follow FCC rules

### **BPT 191 Selected Topics in Broadcasting Production Technology (1-0-0-1)**

Prerequisites: BPT 110 and two of the following: BPT 111, 112, or 113

Corequisites: None

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

### **BPT 210 Broadcast Management (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers management duties within the fields of broadcasting and other electronic media. Emphasis is placed on the management of broadcast stations and cable systems, including financial, personnel, news, sales, and promotion management. Upon completion, students should be able to demonstrate knowledge of successful station operation, including key management concepts and strategies.

### **BPT 215 Broadcast Programming (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers programming methods, research, and resources needed to provide programs for radio, television, cable, and satellite target audiences. Topics include market research and analysis; local, network, and public station programming and program sources; and scheduling procedures for electronic media. Upon completion, students should be able to develop a programming format or schedule.

### **BPT 220 Broadcast Marketing (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces broadcast marketing, including cultivating an audience, building an identity, and servicing customers. Topics include the use of effective promotional tools, marketing research, rating analysis, and the development of a unified marketing plan. Upon completion, students should be able to develop a broadcast marketing plan.

### **BPT 231 Video/TV Production I (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course covers the language of film/video, shot composition, set design, lighting, production planning, scripting, editing, and operation of video and television production equipment. Emphasis is placed on mastering the body of knowledge and techniques followed in producing all forms of video and television production. Upon completion, students should be able to produce basic video and television productions in a team environment.

### **BPT 232 Video/TV Production II (2-6-0-4)**

Prerequisites: BPT 231

Corequisites: None

This course covers advanced video and television production. Emphasis is placed on field production, post-production, digital video effects, graphics, and multi-camera productions. Upon completion, students should be able to create productions that optimize the use of studio, field, and post-production equipment.

### **BPT 235 TV Performance I (0-6-0-2)**

Prerequisites: None

Corequisites: None

This course provides hands-on experience in the operation of television studios and/or stations. Emphasis is placed on the application of skills through direct participation in the production or distribution of television programs. Upon completion, students should be able to demonstrate competence in performing key station and/or studio duties.

### **BPT 236 TV Performance II (0-6-0-2)**

Prerequisites: BPT 235

Corequisites: None

This course provides hands-on experience in the operation of television studios and/or stations. Emphasis is placed on the application of skills through direct participation in the production or distribution of television programs. Upon completion, students should be able to demonstrate competence in performing key station and/or studio duties.

### **BPT 241 Broadcast Journalism I (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces broadcast journalism, including the gathering, writing, delivery, editing, and production of news stories and reports. Emphasis is placed on proper news writing skills, including the creation of good leads and complete stories in the production of radio voices and reports. Upon completion, students should be able to write broadcast news scripts and produce radio news reports and newscasts.

### **BPT 242 Broadcast Journalism II (3-2-0-4)**

Prerequisites: BPT 241

Corequisites: None

This course provides an opportunity to gather, write, edit, and produce broadcast news reports. Emphasis is placed on producing professional broadcast news reports, including script writing,



gathering, and editing. Upon completion, students should be able to produce and record professional broadcast news stories.

**BPT 250 Institutional Video (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers development and production of non-broadcast video productions for clients. Emphasis is placed on satisfying client objectives, including interviewing, research, site surveying, script review, photography, and post-production. Upon completion, students should be able to plan, write, shoot, and edit an institutional video designed to meet a client's objectives.

**BPT 255 Computer-Based Production (2-3-0-3)**

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course covers digital systems used for video, audio, and multimedia production. Emphasis is placed on computer-based tools integrating digital production with analog broadcast-related production. Upon completion, students should be able to understand and operate basic tools for video graphics, video capture, multimedia authoring, sound capture, and digital audio production.

**BPT 260 Multi-Track Recording (2-2-0-3)**

Prerequisites: BPT 132

Corequisites: None

This course covers the application of audio production techniques in a multi-track recording setting. Emphasis is placed on proper use of control room equipment and mix-down of multiple sound sources on both analog and digital recorders. Upon completion, students should be able to produce creative music or supplemental works using sound engineering techniques.

**BUSINESS**

**BUS 110 Introduction to Business (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**BUS 115 Business Law I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the ethics and legal framework of business. Emphasis is placed on contracts, negotiable instruments, Uniform Commercial Code, and the working of the court systems. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**BUS 116 Business Law II (3-0-0-3)**

Prerequisites: BUS 115

Corequisites: None

This course continues the study of ethics and business law. Emphasis is placed on bailments, sales, risk-bearing, forms of business ownership, and copyrights. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations.

**BUS 121 Business Math (2-2-0-3)**

Prerequisites: MAT 060

Corequisites: None

This course covers fundamental mathematical operations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Upon completion, students should be able to apply mathematical concepts to business.

**BUS 125 Personal Finance (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides a study of individual and family financial decisions. Emphasis is placed on building useful skills in buying, managing finances, increasing resources, and coping with current economic conditions. Upon completion, students should be able to develop a personal financial plan.

**BUS 137 Principles of Management (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management.

**BUS 210 Investment Analysis (3-0-0-3)**

Prerequisites: ACC 111 or ACC 120

Corequisites: None

This course examines the concepts related to financial investment and the fundamentals of managing investments. Emphasis is placed on the securities markets, stocks, bond, and mutual funds, as well as tax implications of investment alternatives. Upon completion, students should be able to analyze and interpret investment alternatives and report findings to users of financial information.

**BUS 217 Employment Law and Regs (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the principle laws and regulations affecting public and private organizations and their employees or prospective employees. Topics include fair employment practices, EEO, affirmative action, and employee rights and protections. Upon completion, students should be able to evaluate organization policy for compliance and assure that decisions are not contrary to law.



**BUS 220 Purchasing (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the purchasing function and explains its role in business. Topics include the legal and ethical aspects of purchasing, quality assurance, and the application of purchasing formulas and methods for cost analysis. Upon completion, students should be able to complete a purchase transaction incorporating legal, ethical, quality, and cost consideration.

**BUS 225 Business Finance (2-2-0-3)**

Prerequisites: ACC 120

Corequisites: None

This course provides an overview of business financial management. Emphasis is placed on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management.

**BUS 230 Small Business Management (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the challenges of entrepreneurship including the startup and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan.

**BUS 231 Computerized Inventory (2-2-0-3)**

Prerequisites: ACC 120 and CIS 110 or CIS 111

Corequisites: None

This course provides an overview of inventory procedures as related to management decisions. Emphasis is placed on general terms, methods, techniques, and computer applications. Upon completion, students should be able to apply inventory principles and processes in the workplace.

**BUS 234 Training and Development (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers developing, conducting, and evaluating employee training with attention to adult learning principles. Emphasis is placed on conducting a needs assessment, using various instructional approaches, designing the learning environment, and locating learning resources. Upon completion, students should be able to design, conduct, and evaluate a training program.

**BUS 256 Recruit Select & Per Plan (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the basic principles involved in managing the employment process. Topics include personnel planning, recruiting, interviewing and screening techniques, maintaining employee records; and voluntary and involuntary separations. Upon completion, students

should be able to acquire and retain employees who match position requirements and fulfill organizational objectives. *This course is a unique concentration requirement of the Human Resources Management concentration in the Business Administration program.*

**BUS 258 Compensation and Benefits (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course is designed to study the basic concepts of pay and its role in rewarding performance. Topics include wage and salary surveys, job analysis, job evaluation techniques, benefits, and pay-for-performance programs. Upon completion, students should be able to develop and manage a basic compensation system to attract, motivate, and retain employees. *This course is a unique concentration requirement of the Human Resources Management concentration in the Business Administration program.*

**BUS 259 HRM Applications (3-0-0-3)**

Prerequisites: BUS 217, BUS 234, BUS 256, and BUS 258

Corequisites: None

This course provides students in the Human Resources Management concentration the opportunity to reinforce their learning experiences from preceding HRM courses. Emphasis is placed on application of day-to-day HRM functions by completing in-basket exercises and through simulations. Upon completion, students should be able to determine the appropriate actions called for by typical events that affect the status of people at work. *This course is a unique concentration requirement of the Human Resources Management concentration in the Business Administration program.*

**BUS 260 Business Communication (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: None

This course is designed to develop skills in writing business communications. Emphasis is placed on business reports, correspondence, and professional presentations. Upon completion, students should be able to communicate effectively in the work place.

**CERAMICS - See Art****COMPUTER ENGINEERING TECHNOLOGY****CET 111 Computer Upgrade/Repair I (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course is the first of two courses covering repairing, servicing, and upgrading computers and peripherals in preparation for industry certification. Topics include safety practices, CPU/memory/bus identification, disk subsystem, hardware/software installation/configuration, common device drivers, data recovery, system



maintenance, and other related topics. Upon completion, students should be able to safely repair and/or upgrade computer systems to perform within specifications.

### **CET 211 Computer Upgrade/Repair II (2-3-0-3)**

Prerequisites: CET 111

Corequisites: None

This course is the second of two courses covering repairing, servicing, and upgrading computers and peripherals in preparation for industry certification. Topics include resolving resource conflicts and system bus specifications, configuration and troubleshooting peripherals, operating system configuration and optimization, and other related topics. Upon completion, students should be able to identify and resolve system conflicts and optimize system performance.

### **CET 225 Digital Signal Processing (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course covers the theory and use of digital signal processing techniques. Topics include Fourier analysis, digital filtering, Z transforms, IIR, FIR, convolution, pulse methods, and DSP programming. Upon completion, students should be able to implement and troubleshoot DSP systems in hardware and software.

### **CET 245 Internet Servers (2-3-0-3)**

Prerequisites: CIS 147, CIS 246,  
(CSC 134 or CSC 148),  
and ITN 150

Corequisites: None

This course covers the setup and management of Internet server hardware and software. Topics include TCP/IP, FTP, SMTP, and SNMP; installation and configuration of server software for WWW, FTP, DNS, news, mail, and listserve services; and other topics. Upon completion, students should be able to set up and maintain Internet servers.

## **CHEMISTRY**

### **CHM 121 Foundations of Chemistry (3-0-0-3)**

Prerequisites: MAT 070 and RED 090

Corequisites: CHM 121A

This course is designed for those who have no previous high school chemistry or a grade of C or less in high school chemistry. Topics include matter, structure of the atom, nomenclature, chemical equations, bonding and reactions; mathematical topics include measurements, scientific notation, and stoichiometry. Upon completion, students should be able to demonstrate an understanding of chemical concepts and an ability to solve related problems in subsequent chemistry courses.

### **CHM 121A Foundations of Chem Lab (0-2-0-1)**

Prerequisites: None

Corequisites: CHM 121

This course is a laboratory for CHM 121. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 121.

Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 121.

### **CHM 130 Gen, Org, & Biochemistry (3-0-0-3)**

Prerequisites: MAT 070, RED 090

Corequisites: CHM 130A

This course provides a survey of basic facts and principles of general, organic, and biochemistry. Topics include measurement, molecular structure, nuclear chemistry, solutions, acid-base chemistry, gas laws, and the structure, properties, and reactions of major organic and biological groups. *Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **CHM 130A Gen, Org, & Biochem Lab (0-2-0-1)**

Prerequisites: None

Corequisites: CHM 130

This course is a laboratory for CHM 130. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 130. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 130. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **CHM 131 Introduction to Chemistry (3-0-0-3)**

Prerequisites: MAT 070 and RED 090

Corequisites: None

This course introduces the fundamental concepts of inorganic chemistry topics include measurement, matter and energy, atomic and molecular structure, nuclear chemistry, stoichiometry, chemical formulas and reactions, chemical bonding, gas laws, solutions, and acids and bases. Upon completion, students should be able to demonstrate a basic understanding of chemistry as it applies to other fields. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. *This course is also available through the Virtual Learning Community (VLC).*

### **CHM 131A Introduction to Chemistry Lab (0-3-0-1)**

Prerequisites: None

Corequisites: CHM 131

This course is a laboratory to accompany CHM 131. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 131. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 131. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*



**CHM 132 Organic and Biochemistry (3-3-0-4)**

Prerequisites: CHM 131 and 131A or CHM 151 or Departmental Approval

Corequisites: None

This course provides a survey of major functional classes of compounds in organic and biochemistry. Topics include structure, properties, and reactions of the major organic and biological molecules and basic principles of metabolism. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts needed to pursue studies in related professional fields. *This course has been approved to satisfy the comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. This course is also available through the Virtual Learning Community (VLC).*

**CHM 151 General Chemistry 1 (3-3-0-4)**

Prerequisites: MAT 161 or MAT 171 and CHM 121 or departmental permission

Corequisites: None

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**CHM 152 General Chemistry II (3-3-0-4)**

Prerequisites: CHM 151

Corequisites: None

This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics*

**CHM 251 Organic Chemistry I (3-3-0-4)**

Prerequisites: CHM 152

Corequisites: None

This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers; further topics include isomerization, stereochemistry, and spectroscopy. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of covered organic topics as needed in CHM 252. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**CHM 252 Organic Chemistry II (3-3-0-4)**

Prerequisites: CHM 251

Corequisites: None

This course provides continuation of the systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of aromatics, aldehydes, ketones, carboxylic acids and derivatives, amines and heterocyclics; multi-step synthesis will be emphasized. Upon completion, students should be able to demonstrate an understanding of organic concepts as needed to pursue further study in chemistry and related professional fields. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**CHM 261 Quantitative Analysis (2-6-0-4)**

Prerequisites: CHM 152

Corequisites: None

This course introduces classical methods of chemical analysis with an emphasis on laboratory techniques. Topics include statistical data treatment; stoichiometric and equilibrium calculations; and titrimetric, gravimetric, acid-base, oxidation-reduction, and compleximetric methods. Upon completion, students should be able to perform classical quantitative analytical procedures. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**COMPUTER TECHNOLOGY****CIS 110 Introduction to Computers (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course provides an introduction to computers and computing. Topics include the impact of computers on society, ethical issues, and hardware/software applications, including spreadsheets, databases, word processors, graphics, the Internet, and operating systems. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**CIS 111 Basic PC Literacy (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course provides a brief overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and workplace use. Upon completion, students should be able to demonstrate basic personal computer skills.

**CIS 115 Intro to Prog & Logic (2-2-0-3)**

Prerequisites: MAT 070

Corequisites: None

This course introduces computer programming and problem solving in a programming environment, including an introduction to operating



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systems, text editor, and a language translator. Topics include language syntax, data types, program organization, problem-solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

## **CIS 120 Spreadsheet I (2-2-0-3)**

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts.

## **CIS 121 User Support & Softw Eval (1-4-0-3)**

Prerequisites: CIS 120, CIS 152, CIS 162, CIS 215, OST 136

Corequisites: None

This course provides an opportunity to evaluate software and hardware and make recommendations to meet end-user needs. Emphasis is placed on software and hardware evaluation, installation, training, and support. Upon completion, students should be able to present proposals and make hardware and software recommendations based on their evaluations.

## **CIS 130 Survey of Operating Sys (2-3-0-3)**

Prerequisites: None

Corequisites: None

The course covers operating system concepts which are necessary for maintaining and using computer systems. Topics include disk, file, and directory structures; installation and setup; resource allocation, optimization, and configuration; system security; and other related topics. Upon completion, students should be able to install and configure operating systems and optimize performance.

## **CIS 147 Operating System -Windows (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces operating systems concepts for a Windows operating system. Topics include hardware management, file and memory management, system configuration/ optimization, and utilities. Upon completion, students should be able to perform operating system functions at the support level in a Windows environment.

## **CIS 148 Operating System -Windows NT (2-2-0-3)**

Prerequisites: None

Corequisites: CIS 130

This course introduces operating systems concepts for the Windows NT operating system.

Topics include hardware management, file and memory management, system configuration/optimization, networking options, and utilities. Upon completion, students should be able to perform operating system functions at the single/multi-user support level in a Windows NT environment.

## **CIS 152 Database Concepts & Apps (2-2-0-3)**

Prerequisites: CIS 110 or CIS 111 or CIS 115

Corequisites: None

This course introduces database design and creation using a DBMS product. Topics include database terminology, usage in industry, design theory, types of DBMS models, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to create simple database tables, queries, reports, and forms which follow acceptable design practices.

## **CIS 153 Database Applications (2-2-0-3)**

Prerequisites: CIS 152

Corequisites: None

This course covers advanced database functions continued from CIS 152. Topics include manipulating multiple tables, advanced queries, screens and reports, linking, and command files. Upon completion, students should be able to create multiple table systems that demonstrate updates, screens, and reports representative of industry requirements.

## **CIS 162 MM Presentation Software (2-2-0-3)**

Prerequisites: (CIS 110 or CIS 111)

Corequisites: None

This course is designed to integrate visual and audio resources using presentation software in a simple interactive multimedia project. Emphasis is placed upon design and audience considerations, general prototyping, and handling of media resources. Upon completion, students should be able to demonstrate an original interactive multimedia presentation implementing all of these resources in a professional manner.

## **CIS 172 Intro to the Internet (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the various navigational tools and services of the Internet. Topics include using Internet protocols, search engines, file compression/decompression, FTP, e-mail, list-servers, and other related topics. Upon completion, students should be able to use Internet resources, retrieve/decompress files, and use e-mail, FTP, and other Internet tools.

## **CIS 173 Network Theory (2-2-0-3)**

Prerequisites: None

Corequisites: NET 110

This course examines Token Ring, Ethernet, and Arcnet networks. Topics include LAN topologies and design; cable characteristics; cable, interface cards, server, and client installation; basic management techniques; linking networks; and troubleshooting LAN problems. Upon completion, students should be able to install both hardware and software for a small client/server LAN and troubleshoot common network problems.



**CIS 174 Network System Manager I (2-2-0-3)**

Prerequisites: None

Corequisites: NET 110 and CIS 173

This course covers effective network management. Topics include network file system design and security, login scripts and user menus, printing services, e-mail, and backup. Upon completion, students should be able to administer an office network system.

**CIS 175 Network Management I (2-2-0-3)**

Prerequisites: None

Corequisites: NET 110 and CIS 173

This course covers fundamental network administration and system management. Topics include accessing and configuring basic network services, managing directory services, and using network management software. Upon completion, students should be able to apply system administrator skills in developing a network management strategy.

**CIS 215 Hardware Install/Maint (2-3-0-3)**

Prerequisites: CIS 110 or CIS 111 or CIS 115

Corequisites: None

This course covers the basic hardware of a personal computer, including operations and interactions with software. Topics include component identification, the memory system, peripheral installation and configuration, preventive maintenance, and diagnostics and repair. Upon completion, students should be able to select appropriate computer equipment, upgrade and maintain existing equipment, and troubleshoot and repair non-functioning personal computers.

**CIS 220 Spreadsheet II (1-2-0-2)**

Prerequisites: CIS 120

Corequisites: None

This course covers advanced spreadsheet design and development. Topics include advanced functions, charting, macros, databases, and linking. Upon completion, students should be able to demonstrate competence in designing complex spreadsheets.

**CIS 225 Integrated Software (1-2-0-2)**Prerequisites: CIS 120, CIS 152, CIS 162,  
OST 136

Corequisites: None

This course provides strategies to perform data transfer among software programs. Emphasis is placed on data interchange among word processors, spreadsheets, presentation graphics, databases, and communications products. Upon completion, students should be able to integrate data to produce documents using multiple technologies.

**CIS 246 Operating System - UNIX (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course includes operating systems concepts for UNIX operating systems. Topics include hardware management, file and memory management, system configuration/optimization, utilities, and other related topics. Upon completion, students should be able to effectively use the UNIX operating system and its utilities.

**CIS 274 Network System Manager II (2-2-0-3)**

Prerequisites: CIS 174

Corequisites: None

This course is a continuation of CIS 174 focusing on advanced network management, configuration, and installation. Emphasis is placed on server configuration files, startup procedures, server protocol support, memory and performance concepts, and management and maintenance. Upon completion, students should be able to install and upgrade networks and servers for optimal performance. *This course is a unique concentration requirement in the Network Administration and Support concentration in the Information Systems program.*

**CIS 275 Network Management II (2-2-0-3)**

Prerequisites: CIS 175

Corequisites: None

This course is a continuation of CIS 175 focusing on advanced enterprise networks. Topics include directory service tree planning, management distribution and protection, improving network security, auditing the network, printing, networking, and system administration of an Internet node. Upon completion, students should be able to manage client services and network features and optimize network performance. *This course is a unique concentration requirement in the Network Administration and Support concentration in the Information Systems program.*

**CIS 286 Systems Analysis & Design (3-0-0-3)**

Prerequisites: CIS 115, CSC 138, and CSC 235

Corequisites: None

This course examines established and evolving methodologies for the analysis, design, and development of a business information system. Emphasis is placed on business systems characteristics, managing information systems projects, prototyping, CASE tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

**CIS 287 Network Support (2-2-0-3)**Prerequisites: CIS 175, CIS 274, CIS 275,  
and NET 125

Corequisites: None

This course provides experience using CD ROM and on-line research tools and hands-on experience for advanced hardware support and troubleshooting. Emphasis is placed on troubleshooting network adapter cards and cabling, network storage devices, the DOS workstation, and network printing. Upon completion, students should be able to analyze, diagnose, research, and fix network hardware problems. *This course is a unique concentration requirement in the Network Administration and Support concentration in the Information Systems program.*

**CIS 288 Systems Project (1-4-0-3)**Prerequisites: (CIS 286 or CIS 227), CSC 235,  
CSC 238, CSC 134, CSC 139

Corequisites: None

This course provides an opportunity to complete a significant systems project from the design phase through implementation with minimal



instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete a project from the definition phase through implementation.

## CIVIL ENGINEERING TECHNOLOGY

### CIV 110 Statics/Strength of Materials (2-6-0-4)

Prerequisites: PHY 131 and MAT 121

Corequisites: MAT 122

This course includes vector analysis, equilibrium of force systems, friction, sectional properties, stress/strain, and deformation. Topics include resultants and components of forces, moments and couples, free-body diagrams, shear and moment diagrams, trusses, frames, beams, columns, connections, and combined stresses. Upon completion, students should be able to analyze simple structures.

### CIV 111 Soils and Foundations (2-3-0-3)

Prerequisites: CIV 110 or MEC 250

Corequisites: None

This course presents an overview of soil as a construction material using both analysis and testing procedures. Topics include index properties, classification, stress analysis, compressibility, compaction, dewatering, excavation, stabilization, settlement, and foundations. Upon completion, students should be able to perform basic soil tests and analyze engineering properties of soil. Oral and written communications skills will be emphasized.

### CIV 125 Civil/Surveying CAD (1-6-0-3)

Prerequisites: CIS 111 or CSC 129  
and EGR 115 and SRV 110

Corequisites: None

This course introduces civil/surveying computer-aided drafting (CAD) software. Topics include drawing, editing, and dimensioning commands; plotting; and other related civil/surveying topics. Upon completion, students should be able to produce civil/surveying drawings using CAD software.

### CIV 210 Engineering Materials (1-3-0-2)

Prerequisites: CIV 110

Corequisites: None

This course covers the behavior and properties of Portland cement and asphaltic concretes and laboratory and field testing. Topics include cementing agents and aggregates; water and admixtures; proportioning, production, placing, consolidation, and curing; and inspection methods. Upon completion, students should be able to proportion concrete mixes to attain predetermined strengths and other properties and perform standard control tests. Oral and written communications skills will be emphasized.

### CIV 211 Hydraulics and Hydrology (2-3-0-3)

Prerequisites: CIV 110 or MEC 250

Corequisites: None

This course introduces the basic engineering principles and characteristics of hydraulics and

hydrology. Topics include precipitation and runoff, fluid statics and dynamics, flow measurement, and pipe and open channel flow. Upon completion, students should be able to analyze and size drainage structures.

### CIV 212 Environmental Planning (2-3-0-3)

Prerequisites: CIV 211

Corequisites: None

This course covers water and wastewater technology, erosion and sedimentation control, and other related topics. Topics include collection, treatment, and distribution of water and wastewater and erosion and sedimentation control law. Upon completion, students should be able to demonstrate knowledge of water and wastewater systems and prepare erosion and sedimentation control plans.

### CIV 215 Highway Technology (1-3-0-2)

Prerequisites: CIV 110 and SRV 111

Corequisites: CIV 211

This course introduces the essential elements of roadway components and design. Topics include subgrade and pavement construction, roadway drawings and details, drainage, superelevation, and North Carolina Department of Transportation Standards. Upon completion, students should be able to use roadway drawings and specifications to develop superelevation, drainage, and general highway construction details.

### CIV 220 Basic Structural Concepts (1-3-0-2)

Prerequisites: CIV 110 or MEC 250

Corequisites: None

This course covers the historical perspective of structures as well as types, materials, common elements, and mechanical principles of structures. Topics include basic structure shapes, advantages and disadvantages of standard building materials, application of structural concepts, and other related topics. Upon completion, students should be able to demonstrate an understanding of basic structural concepts.

### CIV 221 Steel and Timber Design (2-3-0-3)

Prerequisites: CIV 110 or MEC 250

Corequisites: None

This course introduces the basic elements of steel and timber structures. Topics include the analysis and design of steel and timber beams, columns, and connections and the use of appropriate manuals and codes. Upon completion, students should be able to analyze, design, and draw simple steel and timber structures.

### CIV 222 Reinforced Concrete (2-3-0-3)

Prerequisites: CIV 110 or MEC 250

Corequisites: None

This course introduces the basic elements of reinforced concrete and masonry structures. Topics include analysis and design of reinforced concrete beams, slabs, columns, footings, and retaining walls; load-bearing masonry walls; and ACI manuals and codes. Upon completion, students should be able to analyze and design components of a structure using reinforced concrete and masonry elements and utilize appropriate ACI publications.



**CIV 230 Construction Estimating (2-3-0-3)**

Prerequisites: CIS 111, EGR 115,

CIS 110 or ARC 111

Corequisites: None

This course covers quantity take-offs of labor, materials, and equipment and calculation of direct and overhead costs for a construction project. Topics include the interpretation of working drawings and specifications, types of contracts and estimates, building codes, bidding techniques and procedures, and estimating software. Upon completion, students should be able to prepare a detailed cost estimate and bid documents for a construction project.

**CIV 240 Project Management (2-3-0-3)**

Prerequisites: EGR 115

Corequisites: None

This course introduces construction planning and scheduling techniques and project management software. Topics include construction safety, operation analysis, construction scheduling, construction control systems, claims and dispute resolutions, project records, and documentation. Upon completion, students should be able to demonstrate an understanding of the roles of construction project participants, maintain construction records, and prepare construction schedules.

**CIV 250 Civil Eng Tech Project (1-3-0-2)**

Prerequisites: SRV 111, CIV 230 and CIV 211

Corequisites: None

This course includes an integrated team approach to civil engineering technology projects. Emphasis is placed on project proposal, site selection, analysis/design of structures, construction material selection, time and cost estimating, planning, and management of a project. Upon completion, students should be able to apply team concepts prepare estimates, submit bid proposals, Q manage projects. Oral and written communications skills will be emphasized.

**CRIMINAL JUSTICE****CJC 100 Basic Law Enforcement Training (8-30-0-18)**

Prerequisites: None

Corequisites: None

This course covers the skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Topics are divided into general units of study: legal, patrol duties, law enforcement communications, investigations, practical application and sheriff-specifies. Upon successful completion, the student will be able to demonstrate competence in the topics and areas required for the state comprehensive certification examination. This is a certificate-level course.

**CJC 111 Intro to Criminal Justice (3-0-0-3)**

Prerequisites: ENG 090 and RED 090

Corequisites: None

This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion,

students should be able to define and describe the major system components and their interrelationships and evaluate career options. *This course has been approved for transfer through the Comprehensive Articulation Agreement. This course is also available through the Virtual Learning Community (VLC).*

**CJC 112 Criminology (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response. *This course is also available through the Virtual Learning Community (VLC).*

**CJC 113 Juvenile Justice (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course covers the juvenile justice system and related juvenile issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, special areas and laws unique to juveniles, and other related topics. Upon completion, students should be able to identify discuss juvenile court structure procedures, function and jurisdiction of juvenile agencies, processing detention of juveniles, and case disposition. *This course is also available through the Virtual Learning Community (VLC).*

**CJC 114 Investigative Photography (1-2-0-2)**

Prerequisites: ENG 090

Corequisites: None

This course covers the operation of various photographic equipment and its application to criminal justice. Topics include using various cameras, proper exposure of film, developing film prints, and preparing photographic evidence. Upon completion, students should be able to demonstrate and explain the role of photography and proper film exposure and development techniques.

**CJC 120 Interviews/Interrogations (1-2-0-2)**

Prerequisites: ENG 090

Corequisites: None

This course covers basic and special techniques employed in criminal justice interviews and interrogations. Emphasis is placed on the interview/interrogation process, including interpretation of verbal and physical behavior and legal perspectives. Upon completion, students should be able to conduct interviews/interrogations in a legal, efficient, and professional manner and obtain the truth from suspects, witnesses, and victims.



# COURSE DESCRIPTIONS

## **CJC 121 Law Enforcement Operations (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, students should be able to explain theories, practices, and issues related to law enforcement operations. *This course has been approved for transfer through the Comprehensive Articulation Agreement. This course is also available through the Virtual Learning Community (VLC).*

## **CJC 122 Community Policing (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course covers the historical, philosophical, and practical dimensions of community policing. Emphasis is placed on the empowerment of police and the community to find solutions to problems by forming partnerships. Upon completion, students should be able to define community policing, describe how community policing strategies solve problems, and compare community policing to traditional policing.

## **CJC 131 Criminal Law (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements. *This course is also available through the Virtual Learning Community (VLC).*

## **CJC 132 Court Procedure & Evidence (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

## **CJC 141 Corrections (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components,

processes, and functions of the correctional system. *This course has been approved for transfer through the Comprehensive Articulation Agreement. This course is also available through the Virtual Learning Community (VLC).*

## **CJC 151 Intro to Loss Prevention (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course introduces the concepts and methods related to commercial and private security systems. Topics include the historical, philosophical, and legal basis of security, with emphasis on security surveys, risk analysis, and associated functions. Upon completion, students should be able to demonstrate and understand security systems, risk management, and the laws relative to loss prevention.

## **CJC 198 Seminar in Criminal Justice (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

## **CJC 211 Counseling (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course introduces the basic elements of counseling and specific techniques applicable to the criminal justice setting. Topics include observation, listening, recording, interviewing, and problem exploration necessary to form effective helping relationships. Upon completion, students should be able to discuss and demonstrate the basic techniques of counseling.

## **CJC 212 Ethics & Comm Relations (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations. *This course is also available through the Virtual Learning Community (VLC).*

## **CJC 213 Substance Abuse (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course is a study of substance abuse in our society. Topics include the history and classifications of drug abuse and the social, physical, and psychological impact of drug abuse. Upon completion, students should be able to identify various types of drugs, their effects on human behavior and society, and treatment modalities.



**CJC 214 Victimology (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course introduces the study of victims. Emphasis is placed on roles/characteristics of victims, victim interaction with the criminal justice system and society, current victim assistance programs, and other related topics. Upon completion, students should be able to discuss and identify victims, the uniqueness of victims' roles, and current victim assistance programs.

**CJC 215 Organization & Administration (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course introduces the components and functions of organization and administration as it applies to the agencies of the criminal justice system. Topics include operations/functions of organizations; recruiting, training, and retention of personnel; funding and budgeting; communications; span of control and discretion; and other related topics. Upon completion, students should be able to identify and discuss the basic components and functions of a criminal justice organization and its administrative operations.

**CJC 221 Investigative Principles (3-2-0-4)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course introduces the theories and fundamentals of the investigative process. Topics include crime scene/incident processing, information gathering techniques, collection/preservation of evidence, preparation of appropriate reports, court presentations, and other related topics. Upon completion, students should be able to identify, explain, and demonstrate the techniques of the investigative process, report preparation, and courtroom presentation.

**CJC 222 Criminalistics (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course covers the functions of the forensic laboratory and its relationship to successful criminal investigations and prosecutions. Topics include advanced crime scene processing, investigative techniques, current forensic technologies, and other related topics. Upon completion, students should be able to identify and collect relevant evidence at simulated crime scenes and request appropriate laboratory analysis of submitted evidence.

**CJC 223 Organized Crime (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course introduces the evolution of traditional and non-traditional organized crime and its effect on society and the criminal justice system. Topics include identifying individuals and groups involved in organized crime, areas of criminal activity, legal and political responses to organized crime, and other related topics. Upon completion, students should be able to identify

the groups and activities involved in organized crime and the responses of the criminal justice system.

**CJC 225 Crisis Intervention (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course introduces critical incident intervention and management techniques as they apply to operational criminal justice practitioners. Emphasis is placed on the victim/offender situation as well as job-related high stress, dangerous, or problem solving citizen contacts. Upon completion, students should be able to provide insightful analysis of emotional, violent, drug-induced, and other critical and/or stressful incidents that require field analysis and/or resolution.

**CJC 231 Constitutional Law (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/procedures as interpreted by the courts. *This course is also available through the Virtual Learning Community (VLC).*

**CJC 232 Civil Liability (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course covers liability issues for the criminal justice professional. Topics include civil rights violations, tort liability, employment issues, and other related topics. Upon completion, students should be able to explain civil trial procedures and discuss contemporary liability issues.

**CJC 233 Correctional Law (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course introduces statutory/case law pertinent to correctional concepts, facilities, and related practices. Topics include examination of major legal issues encompassing incarceration, probation, parole, restitution, pardon, restoration of rights, and other related topics. Upon completion, students should be able to identify/discuss legal issues which directly affect correctional systems and personnel.

**CJC 241 Community-Based Corrections (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course covers programs for convicted offenders that are used both as alternatives to incarceration and in post-incarceration situations. Topics include offenders, diversion, house arrest,



restitution, community service, probation and parole, including both public and private participation, and other related topics. Upon completion, students should be able to identify/discuss the various programs from the perspective of the criminal justice professional, the offender, and the community.

### **CJC 250 Forensic Biology (1-2-0-2)**

Prerequisites: ENG 090

Corequisites: BIO 110 or BIO 111

This course covers important biological principles that are applied in the crime laboratory. Topics include forensic toxicology, forensic serology, microscopy, and DNA typing analysis, with an overview of organic and inorganic analysis. Upon completion, students should be able to articulate how a crime laboratory processes physical evidence submitted by law enforcement agencies.

### **CJC 251 Forensic Chemistry 1 (3-2-0-4)**

Prerequisites: ENG 090

Corequisites: None

This course provides a study of the fundamental concepts of chemistry as it relates to forensic science. Topics include physical and chemical properties of substances, metric measurements, chemical changes, elements, compounds, gases, and atomic structure. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of forensic chemistry.

### **CJC 252 Forensic Chemistry II (3-2-0-4)**

Prerequisites: CJC 251 and ENG 090

Corequisites: None

This course provides a study of specialized areas of chemistry specifically related to forensic science. Topics include properties of light, emission and absorption spectra, spectrophotometry, gas and liquid chromatography, and related topics in organic and biochemistry. Upon completion, students should be able to demonstrate an understanding of specialized concepts in forensic chemistry.

## **COOPERATIVE EDUCATION**

### **COE 110 World of Work (1-0-0-1)**

Prerequisites: None

Corequisites: Departmental Approval

This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethic, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully make the transition from school to work.

### **COE 111 Co-op Work Experience I (0-0-10-1)**

Prerequisites: None

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related

work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

### **COE 112 Co-op Work Experience I (0-0-20-2)**

Prerequisites: None

Corequisites: None

This course provides work experience with a college approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

### **COE 113 Co-op Work Experience I (0-0-30-3)**

Prerequisites: None

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

### **COE 114 Co-op Work Experience I (0-0-40-4)**

Prerequisites: None

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

### **COE 115 Work Exp Seminar I (1-0-0-1)**

Prerequisites: None

Corequisites: Departmental Approval

This course description may be written by the individual colleges. This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students will be able to make better career decisions and choices. Course may be customized specific to each curriculum area.

### **COE 121 Co-op Work Experience II (0-0-10-1)**

Prerequisites: Any COE I Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.



**COE 122 Co-op Work Experience II (0-0-20-2)**

Prerequisites: Any COE I Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 123 Co-op Work Experience II (0-0-30-3)**

Prerequisites: Any COE I Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 124 Co-op Work Experience II****(0-0-40-4)**

Prerequisites: Any COE I Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 125 Work Exp Seminar II (1-0-0-1)**

Prerequisites: None

Corequisites: Departmental Approval

This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students will be able to make better career decisions and choices. Course may be customized specific to each curriculum area.

**COE 131 Co-op Work Experience III****(0-0-10-1)**

Prerequisites: Any COE I &amp; II Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 132 Co-op Work Experience III****(0-0-20-2)**

Prerequisites: Any COE I &amp; II Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students

should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 133 Co-op Work Experience III****(0-0-30-3)**

Prerequisites: Any COE I &amp; II Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 134 Co-op Work Experience III****(0-0-40-4)**

Prerequisites: Any COE I &amp; II Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 135 Work Exp Seminar III (1-0-0-1)**

Prerequisites: None

Corequisites: Departmental Approval

This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students will be able to make better career decisions and choices. Course may be customized specific to each curriculum area.

**COE 211 Co-op Work Experience IV (0-0-10-1)**

Prerequisites: Any COE I, II and III

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 212 Co-op Work Experience IV****(0-0-20-2)**

Prerequisites: Any COE I, II and III

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work, experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.



## COE 213 Co-op Work Experience IV (0-0-30-3)

Prerequisites: Any COE I, II and III  
Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## COE 214 Co-op Work Experience IV (0-0-40-4)

Prerequisites: Any COE I, II and III  
Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## COE 215 Work Exp Seminar IV (1-0-0-1)

Prerequisites: None

Corequisites: Departmental Approval

This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students will be able to make better career decisions and choices. Course may be customized specific to each curriculum area.

## COE 221 Co-op Work Experience V (0-0-10-1)

Prerequisites: Any COE I, II, III and IV  
Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## COE 222 Co-op Work Experience V (0-0-20-2)

Prerequisites: Any COE I, II, III and IV Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## COE 223 Co-op Work Experience V (0-0-30-3)

Prerequisites: Any COE I, II, III and IV  
Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## COE 224 Co-op Work Experience V (0-0-40-4)

Prerequisites: Any COE I, II, III and IV  
Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## COE 225 Work Exp Seminar V(1-0-0-1)

Prerequisites: None

Corequisites: Departmental Approval

This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students will be able to make better career decisions and choices. Course may be customized specific to each curriculum area.

## COE 231 Co-op Work Experience VI (0-0-10-1)

Prerequisites: Any COE I, II, III, IV and V  
Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## COE 232 Co-op Work Experience VI (0-0-20-2)

Prerequisites: Any COE I, II, III, IV and V  
Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.



**COE 233 Co-op Work Experience VI  
(0-0-30-3)**

Prerequisites: Any COE I, II, III, IV and V  
Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 234 Co-op Work Experience VI  
(0-0-40-4)**

Prerequisites: Any COE I, II, III, IV and V  
Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 235 Work Exp Seminar VI (1-0-0-1)**

Prerequisites: None

Corequisites: Departmental Approval

This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students will be able to make better career decisions and choices. Course may be customized specific to each curriculum area.

**COMMUNICATIONS****COM 110 Introduction to Communication  
(3-0-0-3)**

Prerequisites: ENG 090, RED 090, or  
Departmental Approval

Corequisites: None

This course provides an overview of the basic concepts of communication and the skills necessary to communicate in various contexts. Emphasis is placed on communication theories and techniques used in interpersonal group, public, intercultural, and mass communication situations. Upon completion, students should be able to explain and illustrate the forms and purposes of human communication in a variety of contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts (substitute). This course is also available through the Virtual Learning Community (VLC).*

**COM 120 Interpersonal Communication  
(3-0-0-3)**

Prerequisites: ENG 090, RED 090, or  
Departmental Approval

Corequisites: None

This course introduces the practices and principles of interpersonal communication in both

dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts (substitute). This course is also available through the Virtual Learning Community (VLC).*

**COM 231 Public Speaking (3-0-03)**

Prerequisites: ENG 101 or ENG 111

Corequisites: None

This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts (substitute). This course is also available through the Virtual Learning Community (VLC).*

**COMPUTER SCIENCE****CSC 129 Technical Programming (2-3-0-3)**

Prerequisites: None

Corequisites: MAT 121

This course introduces the analysis of technical problems by using different software tools. Emphasis is placed on solving technical problems using structured programming logic and tools such as a computer language, spreadsheet software, or an advanced programmable calculator. Upon completion, students should be able to derive solutions to complex technical problems using various software tools.

**CSC 134 C++ Programming (2-3-0-3)**

Prerequisites: CIS 115

Corequisites: None

This course introduces object-oriented computer programming using the C++ programming language. Topics include input/output operations, iteration, arithmetic operations, arrays, pointers, filters, and other related topics. Upon completion, students should be able to design, code, test, and debug C++ language programs. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**CSC 135 COBOL Programming (2-3-0-3)**

Prerequisites: CIS 115

Corequisites: None

This course introduces computer programming using the COBOL programming language.



Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/ tables, and other related topics. Upon completion, students should be able to design, code, test, and debug COBOL language programs.

### **CSC 138 RPG Programming (2-3-0-3)**

Prerequisites: CIS 115

Corequisites: None

This course introduces computer programming using the RPG programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/ tables, and other related topics. Upon completion, students should be able to design, code, test, and debug RPG language programs.

### **CSC 139 Visual BASIC Programming (2-3-0-3)**

Prerequisites: CIS 115

Corequisites: None

This course introduces event-driven computer programming using the Visual BASIC programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, forms, sequential files, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual BASIC language programs.

### **CSC 141 Visual C++ Programming (2-3-0-3)**

Prerequisites: CSC 134

Corequisites: None

This course introduces event-driven computer programming using the Visual C++ programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual C++ language programs.

### **CSC 148 JAVA Programming (2-3-0-3)**

Prerequisites: CIS 115

Corequisites: None

This course introduces computer programming using the JAVA language. Topics include selection, iteration, arithmetic and logical operators, classes, inheritance, methods, arrays, user interfaces, basic applet creation and other related topics. Upon completion, students should be able to design, code, test, and debug JAVA language programs.

### **CSC 160 Intro to Internet Prog (2-2-0-3)**

Prerequisites: CIS 115 and CIS 172

Corequisites: None

The course introduces client-side Internet programming using HTML and Javascript. Topics include use of frames and tables, use of meta tags, and Javascript techniques for site navigation. Upon completion, students should be able to write HTML documents that incorporate programming to provide web page organization and navigation functions.

### **CSC 235 Advanced COBOL (2-3-0-3)**

Prerequisites: CSC 135

Corequisites: None

This course is a continuation of CSC 135 using COBOL with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

### **CSC 238 Advanced RPG (2-3-0-3)**

Prerequisites: CSC 138

Corequisites: None

This course is a continuation of CSC 138 using RPG with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

### **CSC 239 Advanced Visual BASIC (2-3-0-3)**

Prerequisites: CSC 139

Corequisites: None

This course is a continuation of CSC 139 using Visual BASIC with structured programming principles. Emphasis is placed on advanced arrays/ tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

### **CSC 241 Advanced Visual C++ (2-3-0-3)**

Prerequisites: CSC 141

Corequisites: None

This course is a continuation of CSC 141 using Visual C++ with object-oriented programming principles. Emphasis is placed on advanced arrays, file management/processing techniques, data structures, sub-programs, interactive processing, algorithms, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

## **DESIGN - See ART**

## **DESIGN DRAFTING**

### **DDF 211 Design Drafting I (2-6-0-4)**

Prerequisites: DFF 112

Corequisites: None

This course emphasizes design processes for finished products. Topics include data collection from manuals and handbooks, efficient use of materials, design sketching, specifications, and vendor selection. Upon completion, students should be able to research and plan the design process for a finished product.

### **DDF 214 Tool Design (2-4-0-4)**

Prerequisites: DDF 212

Corequisites: None

This course introduces the principles of tool design. Topics including gaging, die work, and



cost analysis using available catalogs and studies using manufacturing processes. Upon completion, students should be able to use catalogs to identify vendors and prepare working drawings for tooling. Oral and written communications skills will be emphasized.

## DIETETIC TECHNICIAN

### DET 110 Dietetic Technician I (6-0-6-8)

Prerequisites: None

Corequisites: None

This course introduces concepts basic to the role of the dietetic technician. Emphasis is placed on community health agencies, basic nutrition throughout the life cycle, and selection of well-balanced diets for the promotion of health. Upon completion of the course students should be able to begin to apply principles of nutrition and diet planning.

### DET 115 Dietetic Technician II (2-0-0-2)

Prerequisites: None

Corequisites: None

This course introduces the principles of food sanitation. Emphasis is placed on the control of food-borne illnesses and contaminants including methods used to prevent contamination during preparation and storage. Upon completion of the course students should be able to apply sanitation principles in practice as a dietetic technician.

### DET 120 Dietetic Technician III (6-0-9-9)

Prerequisites: DET 110

Corequisites: None

This course provides an expanded knowledge base for the dietetic technician. Emphasis is placed on food programs and resources available to meet nutritional needs, basic principles of therapeutic nutrition, and principles of food sanitation. Upon completion the student should be able to begin to participate in the delivery of nutritional care for health promotion or nutritional treatment for common conditions.

### DET 210 Dietetic Technician IV (6-0-12-10)

Prerequisites: DET 110, BIO 163

Corequisites: BIO 275

This course provides an expanded knowledge base in therapeutic nutrition. Emphasis is placed on nutritional assessment throughout the life span, principles of teaching/learning and principles of managing nutritional programs. Upon completion students should be able to assess nutritional status and design menus for individuals with common medical conditions and provide nutritional education.

### DET 220 Dietetic Technician V (6-0-12-10)

Prerequisites: None

Corequisites: None

This course provides an expanded knowledge base in the management of nutrition programs. Emphasis is placed on the application of food production, food service, and nutritional care principles in a health care environment under supervision. Upon completion the student should be able to participate in the management of a nutritional program.

### DET 225 Dietetic Technician VI (2-0-0-2)

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore issues related to the practice of the Dietetic Technician. Emphasis is placed on ethical, legal, professional, and political issues. Upon completion the student should be able to discuss issues relating to the practice of the Dietetic Technician.

## DRAFTING

### DFT 111 Technical Drafting I (1-3-0-2)

Prerequisites: None

Corequisites: None

This course introduces basic drafting skills, equipment, and applications. Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorials drawings, sections, and auxiliary views. Upon completion, students should be able to understand and apply basic drawing principles and practices.

### DFT 111A Technical Drafting I Lab (0-3-1)

Prerequisite: None

Corequisites: DFT 111

This course provides a laboratory setting to enhance basic drafting skills. Emphasis is placed on practical experiences that enhance the topics presented in DFT 111. Upon completion, students should be able to apply the laboratory experiences to concepts presented in DFT 111.

### DFT 112 Technical Drafting II (1-3-0-2)

Prerequisites: DFT 111

Corequisites: None

This course provides for advanced drafting practices and procedures. Topics include detailed working drawings, hardware, fits and tolerances, assembly and sub-assembly, geometric dimensioning and tolerancing, intersections, and developments. Upon completion, students should be able to produce detailed working drawings.

### DFT 112A Technical Drafting II Lab (0-3-1)

Prerequisite: DFT 111, DFT 111A

Corequisites: DFT 112

This course provides a laboratory setting to enhance basic drafting skills. Emphasis is placed on practical experiences that enhance the topics presented in DFT 112. Upon completion, students should be able to apply the laboratory experiences to concepts presented in DFT 112.

### DFT 121 Intro to GD & T (1-2-0-2)

Prerequisites: None

Corequisites: None

This course introduces basic geometric dimensioning and tolerancing principles. Topics include symbols, annotation, theory, and applications. Upon completion, students should be able to interpret and apply basic geometric dimensioning and tolerancing principles to drawings.



# COURSE DESCRIPTIONS

## DFT 151 CAD I (2-3-0-3)

Prerequisites: None

Corequisites: None

This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing.

## DFT 152 CAD II (2-3-0-3)

Prerequisites: DFT 151 Corequisites: None

This course is a continuation of DFT 151. Topics include advanced two-dimensional, three dimensional, and solid modeling and extended CAD applications. Upon completion, students should be able to generate and manage CAD drawings and models to produce engineering documents.

## DFT 153 CAD III (2-3-0-3)

Prerequisites: DFT 151

Corequisites: None

This course introduces advanced CAD applications. Emphasis is placed upon advanced applications of CAD skills. Upon completion, students should be able to use advanced CAD applications to generate and manage data.

## DFT 170 Engineering Graphics (2-2-0-3)

Prerequisites: None

Corequisites: None

This course introduces basic engineering graphics and applications. Topics include sketching, selection and use of current methods and tools, and the use of engineering graphics applications. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## DFT 211 Gears, Cams, & Pulleys (1-3-0-2)

Prerequisites: DFT 111 and MAT 121,

MAT 161, MAT 171, or MAT175

Corequisites: None

This course introduces the principles of motion transfer. Topics include gears, cams, pulleys, and drive components. Upon completion, students should be able to solve problems and produce drawings dealing with ratios.

## DFT 231 Jig & Fixture Design (1-2-0-2)

Prerequisites: DFT 112 and MEC 210

Corequisites: None

This course introduces the study of jigs and fixtures. Topics include different types, components, and uses of jigs and fixtures. Upon completion, students should be able to analyze, design, and complete a set of working drawings for a jig or fixture. Oral and written communications skills will be emphasized.

## DFT 243 Basic Die Design (2-6-0-4)

Prerequisites: DFT 151

Corequisites: None

This course introduces the basic principles and applications of die making. Topics include types,

construction, and application of dies. Upon completion, students should be able to design and make detailed drawings of simple dies.

## ECONOMICS

### ECO 151 Survey of Economics (3-0-0-3)

Prerequisites: None

Corequisites: None

This course, for those who have not received credit for ECO 251 or 252, introduces basic concepts of micro- and macroeconomics. Topics include supply and demand, optimizing economic behavior, prices and wages, money, interest rates, banking system, unemployment, inflation, taxes, government spending, and international trade. Upon completion, students should be able to explain alternative solutions for economic problems faced by private and government sectors. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*

### ECO 251 Prin of Microeconomics (3-0-0-3)

Prerequisites: None

Corequisites: None

This course introduces economic analysis of individual, business, and industry in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

### ECO 252 Prin of Macroeconomics (3-0-0-3)

Prerequisites: None

Corequisites: None

This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

## EDUCATION

### EDU 119 Early Childhood Ed (4-0-0-4)

Prerequisites: None

Corequisites: None

This course covers the foundations of the education profession, the diverse educational settings for young children, professionalism and planning developmentally appropriate programs for children. Topics include historical foundations, pro-



gram types, career options, professionalism, and creating inclusive environments and curriculum that are responsive to the needs of children and families. Upon completion, students should be able to design career plans and develop appropriate schedules, environments and activity plans while incorporating adaptations for children with exceptionalities. This course should be taken during the first semester in the Early Childhood Program. *This course is also available through the Virtual Learning Community (VLC).*

### **EDU 131 Child, Family, & Commun (3-0-0-3)**

Prerequisites: None

Corequisites: EDU 119

This course covers the development of partnerships between families, inclusive programs for children/schools that serve young children with and without disabilities, and the community. Emphasis is placed on requisite skills and benefits for successfully establishing, supporting, and maintaining respectful collaborative relationships between today's diverse families, centers/schools, and community resources. Upon completion, students should be able to describe appropriate relationships with parents/caretakers, center/school colleagues, and community agencies that enhance the educational experiences/well-being of all children. *This course is also available through the Virtual Learning Community (VLC).*

### **EDU 144 Child Development I (3-0-0-3)**

Prerequisites: None

Corequisites: EDU 119

This course covers the theories of child development, developmental sequences, and factors that influence children's development, from conception through pre-school for all children. Emphasis is placed on sequences in physical/motor, social, emotional, cognitive, and language development and the multiple influences on development and learning of the whole child. Upon completion, students should be able to identify typical and atypical developmental characteristics, plan experiences to enhance development, and describe appropriate interaction techniques and environments. *This course is also available through the Virtual Learning Community (VLC).*

### **EDU 145 Child Development II (3-0-0-3)**

Prerequisites: None

Corequisites: EDU 119

This course covers theories of child development, developmental sequences, and factors that influence children's development, from pre-school through middle childhood for all children. Emphasis is placed on sequences in physical/motor, social, emotional, cognitive, and language development and the multiple influences on development and learning of the whole child. Upon completion, students should be able to identify typical and atypical developmental characteristics, plan experiences to enhance development, and describe appropriate interaction techniques and environments. *This course is also available through the Virtual Learning Community (VLC).*

### **EDU 146 Child Guidance (3-0-0-3)**

Prerequisites: None

Corequisites: EDU 119

This course introduces practical principles and techniques for providing developmentally appropriate guidance for all children with and without disabilities, including those at risk. Emphasis is placed on encouraging self-esteem, cultural awareness, effective communication skills, direct/indirect techniques/strategies and observation to understand the underlying causes of behavior. Upon completion, students should be able to demonstrate appropriate interactions with children and families and promote conflict resolution, self-control, self-motivation, and self-esteem in children. *This course is also available through the Virtual Learning Community (VLC).*

### **EDU 151 Creative Activities (3-0-0-3)**

Prerequisites: None

Corequisites: EDU 119

This course covers planning, creation and adaptation of developmentally supportive learning environments with attention to curriculum, interactions, teaching practices and learning materials. Emphasis is placed on creating and adapting integrated, meaningful, challenging and engaging developmentally supportive learning experiences in art, music, movement and physical skills, and dramatics. Upon successful completion, students should be able to create, manage, adapt and evaluate developmentally supportive learning materials, experiences and environments.

### **EDU 153 Health, Safety, & Nutrition (3-0-0-3)**

Prerequisites: None

Corequisites: EDU 119

This course focuses on promoting and maintaining the health and well-being of all children. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy environments, recognition and reporting of abuse and neglect and state regulations. Upon completion, students should be able to demonstrate knowledge of health, safety, and nutritional needs, implement safe learning environments, and adhere to state regulations.

### **EDU 216 Foundations of Education (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces the American educational system and the teaching profession. Topics include historical and philosophical foundations of education, contemporary educational, structural, legal, and financial issues, PRAXIS I preparation and observation and participation in public school classrooms. Upon completion, students should be able to relate classroom observations to the roles of teachers and schools and the process of teacher education. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).*



# COURSE DESCRIPTIONS

## **EDU 221 Children with Exceptional (3-0-0-3)**

Prerequisites: EDU 144 and EDU 145  
or PSY 244 and PSY 245

Corequisites: None

This course, based on the foundations of typical development, introduces working with children with exceptionalities. Emphasis is placed on the characteristics and assessment of children and strategies for adapting the learning environment. Upon completion, students should be able to recognize atypical development, make appropriate referrals, collaborate with families and professionals to plan, implement, and evaluate inclusion strategies. *This course is also available through the Virtual Learning Community (VLC).*

## **EDU 234 Infants, Toddlers, & Twos (3-0-0-3)**

Prerequisites: None

Corequisites: EDU 119

This course covers the skills needed to effectively implement group care for infants, toddlers, and two year olds. Emphasis is placed on child development and developmentally appropriate practices. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate a developmentally appropriate curriculum.

## **EDU 235 School-Age Dev & Program (2-0-0-2)**

Prerequisites: None

Corequisites: EDU 119

This course presents developmentally appropriate practices in group care for school-age children. Topics include principles of development, environmental planning, and positive guidance techniques. Upon completion, students should be able to discuss developmental principles for children five to twelve years of age and plan and implement age-appropriate activities.

## **EDU 250 PRAXIS I Preparation (1-0-0-1)**

Prerequisites: None

Corequisites: EDU 119

This course is designed to prepare potential teachers for the PRAXIS I exam that is necessary to enter the field of education. Emphasis is placed on content specifications of the PRAXIS I exam, study skills and simulated examinations. Upon completion, students should be able to demonstrate an understanding of the content necessary for successful completion of the PRAXIS I exam.

## **EDU 251 Exploration Activities (3-0-0-3)**

Prerequisites: None

Corequisites: EDU 119

This course covers discovery experiences in science, math, and social studies. Emphasis is placed on developing concepts for each area and encouraging young children to explore, discover, and construct concepts. Upon completion, students should be able to discuss the discovery approach to teaching, explain major concepts in each area, and plan appropriate experiences for children.

## **EDU 259 Curriculum Planning (3-0-0-3)**

Prerequisites: EDU 112 or EDU 113, or EDU 119  
Corequisites: None

This course covers early childhood curriculum planning. Topics include philosophy, curriculum, indoor and outdoor environmental design, scheduling, observation and assessment, and instructional planning and evaluation. Upon completion, students should be able to assess children and curriculum; plan for daily, weekly, and long-range instruction; and design environments with appropriate equipment and supplies.

## **EDU 261 Early Childhood Admin I (2-0-0-2)**

Prerequisites: EDU 111 and EDU 112

Corequisites: EDU 119

This course covers the policies, procedures, and responsibilities for the management of early childhood education programs. Topics include implementation of goals, principles of supervision, budgeting and financial management, and meeting the standards for a NC Child Day Care license. Upon completion, students should be able to develop program goals, explain licensing standards, determine budgeting needs, and describe effective methods of personnel supervision. *This course is also available through the Virtual Learning Community (VLC).*

## **EDU 262 Early Childhood Admin 11 (3-0-0-3)**

Prerequisites: EDU 261

Corequisites: EDU 288

This course provides a foundation for budgetary, financial, and personnel management of the child care center. Topics include budgeting, financial management, marketing, hiring, supervision, and professional development of a child care center. Upon completion, students should be able to formulate marketing, financial management, and fund development plans and develop personnel policies, including supervision and staff development plans. *This course is also available through the Virtual Learning Community (VLC).*

## **EDU 271 Educational Technology (2-2-0-3)**

Prerequisites: None

Corequisites: EDU 119

This course introduces the use of technology to enhance teaching and learning in all educational settings. Topics include technology concepts, instructional strategies, materials and adaptive technology for children with exceptionalities, facilitation of assessment/evaluation, and ethical issues surrounding the use of technology. Upon completion, students should be able to apply technology enhanced instructional strategies, use a variety of technology resources and demonstrate appropriate technology skills in educational environments.

## **EDU 280 Language & Literacy Exp (3-0-0-3)**

Prerequisites: None

Corequisites: EDU 119

This course explores the continuum of children's communication development, including verbal and written language acquisition and other forms of communication. Topics include selection of



literature and other media, the integration of literacy concepts throughout the classroom environment, inclusive practices and appropriate assessments. Upon completion, students should be able to select, plan, implement and evaluate developmentally appropriate literacy experiences. *This course is also available through the Virtual Learning Community (VLC).*

### **EDU 288 Adv Issues/Early Child Ed (2-0-0-2)**

Prerequisites: 40 semester hours in the Early Childhood Program or departmental approval

Corequisites: EDU 119

This course covers advanced topics and issues in early childhood. Emphasis is placed on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to list, discuss, and explain advanced current topics and issues in early childhood education. This is a capstone course for the Early Childhood Program.

## **PRE-ENGINEERING**

### **EGR 115 Intro to Technology (2-3-0-3)**

Prerequisites: None

Corequisites: EGR 115A

This course introduces the basic skills and career fields for technicians. Topics include career options, technical vocabulary, dimensional analysis, measurement systems, engineering graphics, calculator applications, professional ethics, safety practices, and other related topics. Upon completion, students should be able to demonstrate an understanding of the basic technologies, prepare drawings and sketches, and perform computations using a scientific calculator.

### **EGR 115A Intro to Technology Lab (0-3-0-1)**

Prerequisites: None

Corequisites: EGR 115

This course provides a laboratory setting for EGR 115. Emphasis is placed on developing skills in dimensional analysis, measurement systems, engineering graphics, and calculator applications. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in EGR 115.

### **EGR 130 Engineering Cost Control (2-2-0-3)**

Prerequisites: MAT 121, MAT 161 or MAT 171

Corequisites: None

This course covers the management of projects and systems through the control of costs. Topics include economic analysis of alternatives within budget constraints and utilization of the time value of money approach. Upon completion, students should be able to make choices that optimize profits on both short-term and long-term decisions. Incorporated into the course are concepts covering accounting methodology, cost systems including activity-based costing, and cost estimating practices.

### **EGR 285 Design Project (0-4-0-2)**

Prerequisites: ELN 232 or ISC 243 or MEC 250

Corequisites:

This course provides the opportunity to design and construct an instructor-approved project using previously acquired skills. Emphasis is placed on selection, proposal, design, construction, testing, and documentation of the approved project. Upon completion, students should be able to present and demonstrate operational projects. Oral and written communications skills will be emphasized.

## **ELECTRICAL TECHNOLOGY**

### **ELC 111 Intro, to Electricity (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the fundamental concepts of electricity and test equipment to non-electrical/ electronics majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.

### **ELC 112 DC/AC Electricity (3-6-0-5)**

Prerequisites: None

Corequisites: None

This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, and analyze simple DC/ AC circuits.

### **ELC 113 Basic Wiring I (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course introduces the care/usage of tools and materials used in electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety, and electrical blueprint reading; planning, layout; and installation of electrical distribution equipment; lighting; overcurrent protection; conductors; branch circuits; and conduits. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with basic electrical installations.

### **ELC 114 Basic Wiring II (2-6-0-4)**

Prerequisites: ELC 113

Corequisites: None

This course provides additional instruction in the application of electrical tools, materials, and test equipment associated with electrical installations. Topics include the NEC; safety; electrical blueprints; planning, layout, and installation of equipment and conduits; and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with electrical installations.



**ELC 115 Industrial Wiring (2-6-0-4)**

Prerequisites: ELC 113

Corequisites: None

This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment.

**ELC 117 Motors and Controls (2-6-0-4)**

Prerequisites: ELC 112, ELC 131

Corequisites: None

This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

**ELC 118 National Electrical Code (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers the use of the current National Electrical Code. Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

**ELC 119 NEC Calculations (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers branch circuit, feeder, and service calculations. Emphasis is placed on sections of the National Electrical Code related to calculations. Upon completion, students should be able to use appropriate code sections to size wire, conduit, and overcurrent devices for branch circuits, feeders, and service.

**ELC 126 Electrical Computations (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the fundamental applications of mathematics which are used by an electrical/electronics technician. Topics include whole numbers, fractions, decimals, powers, roots, simple electrical formulas, and usage of a scientific calculator. Upon completion, students should be able to solve simple electrical mathematical problems.

**ELC 128 Intro to PLC (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to install PLCs and create simple programs.

**ELC 131 DC/AC Circuit Analysis (4-3-0-5)**

Prerequisites: None

Corequisites: MAT 121

This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation software, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment.

**ELC 133 Adv. Circuit Analysis (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers additional concepts of DC/AC electricity, the use of test equipment, and measurement techniques for electrical/electronics majors. Topics include the application of network theorems such as delta/wye transformations, Superposition Theorem, and other advanced circuit analysis principles. Upon completion, students should be able to construct and analyze DC/AC circuits, use advanced circuit analysis theorems, circuit simulators, and test equipment.

**ELC 135 Electrical Machines I (2-2-0-3)**

Prerequisites: ELC 112, ELC 131 or ELC 140

Corequisites: None

This course covers magnetic circuits, transformers, DC/AC generators, and a review of the three-phase circuit fundamentals including power factor. Topics include magnetic terms and calculations, transformer calculations based on primary or secondary equivalent circuits, and generator regulation and efficiency calculations. Upon completion, students should be able to perform regulation and efficiency calculations for DC/AC single- and three-phase transformer and generator circuits.

**ELC 140 Fund of DC/AC Circuit (5-6-0-7)**

Prerequisites: None

Corequisites: None

This course covers the principles of DC/AC circuit analysis as applied to electronics. Topics include atomic theory, circuit analysis, components, test equipment, troubleshooting techniques, schematics, diagrams, and other related topics. Upon completion, students should be able to interpret, construct, verify, analyze, and troubleshoot DC/AC circuits in a safe manner.

**ELC 228 PLC Applications (2-6-0-4)**

Prerequisites: ELC 128

Corequisites: None

This course continues the study of the programming and applications of programmable logic controllers. Emphasis is placed on advanced programming, networking, advanced I/O modules, reading and interpreting error codes, and troubleshooting. Upon completion, students should be able to program and troubleshoot programmable logic controllers.



**ELC 231 Electric Power Systems (3-2-0-4)**

Prerequisites: ELC 131

Corequisites: None

This course covers the basic principles of electric power systems, including transmission lines, generator and transformer characteristics, and fault detection and correction. Emphasis is placed on line diagrams and per unit calculations for circuit performance analysis in regards to voltage regulation, power factor, and protection devices. Upon completion, students should be able to analyze simple distribution subsystems, calculate fault current, and determine the size and type of circuit protection devices. Oral and written communications skills will be emphasized.

**ELECTRONICS TECHNOLOGY****ELN 131 Electronic Devices (3-3-0-4)**

Prerequisites: ELC 112, ELC 131 or ELC 140

Corequisites: None

This course includes semiconductor-based devices such as diodes, bipolar transistors, FETs, thermistors, and related components. Emphasis is placed on analysis, selection, biasing, and applications in power supplies, small signal amplifiers, and switching and control circuits. Upon completion, students should be able to construct, analyze, verify, and troubleshoot discrete component circuits using appropriate techniques and test equipment.

**ELN 132 Linear IC Applications (3-3-0-4)**

Prerequisites: ELN 131 or BMT 113

Corequisites: None

This course introduces the characteristics and applications of linear integrated circuits. Topics include op-amp circuits, differential amplifiers, instrumentation amplifiers, waveform generators, active filters, PLLs, and IC voltage regulators. Upon completion, students should be able to construct, analyze, verify, and troubleshoot linear integrated circuits using appropriate techniques and test equipment. Integrated circuit fabrication is also covered.

**ELN 133 Digital Electronics (3-3-0-4)**

Prerequisites: None

Corequisites: None

This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, MSI and LSI circuits, AD/DA conversion, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

**ELN 150 CAD for Electronics (1-3-0-2)**

Prerequisites: CIS 110 or CIS 111 or ELC 127

Corequisites: None

This course introduces computer-aided drafting (CAD) with an emphasis on applications in the electronics field. Topics include electronics industry standards (symbols, schematic diagrams, layouts); drawing electronic circuit diagrams; and specialized electronic drafting practices and components such as resistors, capacitors, and ICs. Upon completion, students should

be able to prepare electronic drawings with CAD software.

**ELN 154 Intro to Data Comm (2-3-0-3)**

Prerequisites: ELN 133

Corequisites: None

This course introduces the principal elements and theory (analog and digital techniques) of data communication systems and how they are integrated as a complete network. Topics include an overview of data communication, OSI model, transmission modes, serial and parallel interfaces, applications of ICs, protocols, network configurations, modems, and related applications. Upon completion, students should be able to demonstrate knowledge of the concepts associated with data communication systems and high speed networks.

**ELN 229 Industrial Electronics (2-4-0-4)**

Prerequisites: ELC 112, ELC 131 or ELC 140

Corequisites: None

This course covers semiconductor devices used in industrial applications. Topics include the basic theory, application, and operating characteristics of semiconductor devices (filters, rectifiers, FET, SCR, Diac, Triac, Op-amps, etc). Upon completion, students should be able to install and/or troubleshoot these devices for proper operation in an industrial electronic circuit. Oral and written communications skills will be emphasized.

**ELN 232 Intro to Microprocessors (3-3-0-4)**

Prerequisites: ELN 133

Corequisites: None

This course introduces microprocessor architecture and microcomputer systems including memory and input/output interfacing. Topics include assembly language programming, bus architecture, bus cycle types, I/O systems, memory systems, interrupts, and other related topics. Upon completion, students should be able to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and test equipment. Oral and written communications skills will be emphasized.

**ELN 233 Microprocessor Systems (3-3-0-4)**

Prerequisites: ELN 232

Corequisites: None

This course covers the application and design of microprocessor control systems. Topics include control and interfacing of systems using AD/DA, serial/parallel I/O, communication protocols, and other related applications. Upon completion, students should be able to design, construct, program, verify, analyze, and troubleshoot fundamental microprocessor interface and control circuits using related equipment.

**ELN 234 Communication Systems (3-3-0-4)**

Prerequisites: ELN 132 or ELN 140

Corequisites: None

This course introduces the fundamentals of electronic communication systems. Topics include the frequency spectrum, electrical noise, modulation techniques, characteristics of transmitters



and receivers, and digital communications. Upon completion, students should be able to interpret analog and digital communication circuit diagrams, analyze transmitter and receiver circuits, and use appropriate communication test equipment. Oral and written communications skills will be emphasized.

### **ELN 235 Data Communication Systems (3-3-0-4)**

Prerequisites: ELN 133

Corequisites: None

This course covers data communication systems and the transmission of digital information from source to destination. Topics include data transmission systems, serial interfaces and modems, protocols, networks, and other related topics. Upon completion, students should be able to demonstrate knowledge of the concepts associated with data communication systems. Oral and written communications skills will be emphasized.

### **ELN 237 Local Area Networks (2-3-0-3)**

Prerequisites: CIS 110 or CIS 111 or CET 111 or ELC 127

Corequisites: None

This course introduces the fundamentals of local area networks and their operation in business and computer environments. Topics include the characteristics of network topologies, system hardware (repeaters, bridges, routers, gateways), system configuration, and installation and administration of the LAN. Upon completion, students should be able to install, maintain, and manage a local area network.

### **ELN 238 Advanced LANs (2-3-0-3)**

Prerequisites: ELN 237

Corequisites: None

This course covers advanced concepts, tools, and techniques associated with servers, workstations, and overall local area network performance. Topics include network security and configuration, system performance and optimization, communication protocols and packet formats, troubleshooting techniques, multi-platform integration, and other related topics. Upon completion, students should be able to use advanced techniques to install, manage, and troubleshoot networks and optimize server and workstation performance.

### **ELN 240 Microprocessor Fund (3-3-0-4)**

Prerequisites: ELN 141

Corequisites: None

This course introduces microprocessor architecture and microcomputer systems. Topics include use of technical documentation, bus architecture, I/O and memory systems, and other related topics. Upon completion, students should be able to analyze and troubleshoot basic microprocessor circuits.

### **ELN 244 Computer Repair (3-6-0-5)**

Prerequisites: ELN 133 or ELN 141

Corequisites: None

This course covers the assembly, upgrading, and repair of microcomputers. Topics include logic test equipment, computer motherboards, storage devices, I/O devices, power supplies, and other peripherals. Upon completion, students should be able to assemble, upgrade, maintain, troubleshoot, and repair microcomputers.

### **ELN 246 Cert Elect Tech Prep (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers electronic principles, theories, and concepts. Emphasis is placed on those items covered in the Certified Electronic Technician examination. Upon completion, students should be able to demonstrate competence in electronics and be prepared for the Certified Electronic Technician examination.

### **ELN 260 Prog Logic Controllers (3-3-0-4)**

Prerequisites: None

Corequisites: None

This course provides a detailed study of PLC applications, with a focus on design of industrial control circuits using the PLC. Topics include PLC components, memory organization, math instructions, programming documentation, input/output devices, and applying PLCs in the design of industrial control systems. Upon completion, students should be able to design and program a PLC system to perform a wide variety of industrial control functions.

## **EMERGENCY MEDICAL SCIENCE**

### **EMS 110 EMT-Basic (5-6-0-7)**

Prerequisites: Departmental Approval

Corequisites: None

This course introduces basic emergency medical care. Topics include preparatory, airway, patient assessment, medical emergencies, trauma, infants and children, and operations. Upon completion, students should be able to demonstrate the skills necessary to achieve North Carolina State or National Registry EMT-Basic certification.

### **EMS 120 Intermediate Interventions (2-3-0-3)**

Prerequisites/Corequisites: BIO 168 or

Departmental Approval

Corequisites: COE 111, EMS 121, EMS 122, EMS 130, EMS 131

Current NC-Emergency Medical Technician certificate is required for students enrolling in this course. This course is designed to provide the necessary information for interventions appropriate to the EMT-Intermediate and is required for intermediate certification. Topics include automated external defibrillation, basic cardiac electrophysiology, intravenous therapy, venipuncture, acid-base balance, and fluids and electrolytes. Upon completion, students should be



able to properly establish an IV line, obtain venous blood, utilize AEDs, and correctly interpret arterial blood gases. *Current NC-Emergency Medical Technician Basic certificate is required for students enrolling in this course.*

**EMS 121 EMS Clinical Practicum I (0-0-6-2)**

Prerequisites or Corequisite: BIO 168 or  
Departmental Approval

Corequisites: BIO 168, EMS 120, EMS 130,  
EMS 131

This course is the initial hospital and field internship and is required for intermediate and paramedic certification. Emphasis is placed on intermediate-level care. Upon completion, students should be able to demonstrate competence with intermediate-level skills.

**EMS 125 EMS Instructor Methodology (1-2-0-2)**

Prerequisites: Enrollment in EMS program

Corequisites: None

This course covers the information needed to develop and instruct EMS courses. Topics include instructional methods, lesson plan development, time management skills, and theories of adult learning. Upon completion, students should be able to teach EM courses and meet the North Carolina EMS requirements for instructor methodology.

**EMS 130 Pharmacology I for EMS (1-3-0-2)**

Prerequisites: BIO 168  
or Departmental Approval

Corequisites: EMS 120, EMS 130, EMS 131

This course introduces the fundamental principles of pharmacology and medication administration and is required for intermediate and paramedic certification. Topics include terminology, pharmacokinetics, pharmacodynamics, weights, measures, drug calculations, legislation, and administration routes. Upon completion, students should be able to accurately calculate drug dosages, properly administer medications, and demonstrate general knowledge of pharmacology.

**EMS 131 Advanced Airway Management (1-2-0-2)**

Prerequisites: EMS 110 or  
Departmental Approval

Corequisites: BIO 168, EMS 120, EMS 130

This course is designed to provide advanced airway management techniques and is required for intermediate and paramedic certification. Topics include respiratory anatomy and physiology, airway, ventilation, adjuncts, surgical intervention, and rapid sequence intubation. Upon completion, students should be able to properly utilize all airway adjuncts and pharmacology associated with airway control and maintenance.

**EMS 140 Rescue Scene Management (1-3-0-2)**

Prerequisites: EMS 110 or  
Departmental Approval

Corequisites: None

This course introduces rescue scene management and is required for paramedic certification. Topics include response to hazardous material

conditions, medical incident command, and extrication of patients from a variety of situations. Upon completion, students should be able to recognize and manage rescue operations based upon initial and follow-up scene assessment.

**EMS 150 Emergency Vehicles & EMS Comm (1-3-0-2)**

Prerequisites: EMS 110 or  
Departmental Approval

Corequisites: None

This course examines the principles governing emergency vehicles, maintenance of emergency vehicles, and EMS communication equipment and is required for paramedic certification. Topics include applicable motor vehicle laws affecting emergency vehicle operation, defensive driving, collision avoidance techniques, communication systems, and information management systems. Upon completion, students should have a basic knowledge of emergency vehicles, maintenance, and communication needs.

**EMS 210 Advanced Patient Assessment (1-3-0-2)**

Prerequisites: BIO 168, EMS 110

Corequisites: EMS 120, EMS 130, EMS 131,  
EMS 121

This course covers advanced patient assessment techniques and is required for paramedic certification. Topics include initial assessment, medical-trauma history, field impression, complete physical exam process, on-going assessment, and documentation skills. Upon completion, students should be able to utilize basic communication skills and record and report collected patient data.

**EMS 220 Cardiology (3-3-0-4)**

Prerequisites: EMS 121, EMS 120, EMS 130,  
EMS 131

Corequisites: EMS 221

This course provides an in-depth study of cardiovascular emergencies and is required for paramedic certification. Topics include anatomy and physiology, pathophysiology, rhythm interpretation, cardiac pharmacology, and patient treatment. Upon completion, students should be able to certify at the Advanced Cardiac Life Support Provider level utilizing American Heart Association guidelines.

**EMS 221 EMS Clinical Practicum II (0-0-9-3)**

Prerequisites: EMS 120, EMS 121, EMS 130,  
EMS 131, EMS 210

Corequisites: EMS 220, EMS 210,

Current NC EMT Certification is required for students enrolling in this course. This course is a continuation of the hospital and field internship required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care. Current NC EMT Certification is required for students enrolling in this course.



**EMS 231 EMS Clinical Pract III (0-0-9-3)**

Prerequisites: EMS 221, EMS 222, COE 121

Corequisites: None

This course is a continuation of the hospital and field internship required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

**EMS 235 EMS Management (2-0-0-2)**

Prerequisites: EMS 110 or

Departmental Approval

Corequisites: None

This course stresses the principles of managing a modern emergency medical service system. Topics include structure and function of municipal governments, EMS grantsmanship, finance, regulatory agencies, system management, legal issues, and other topics relevant to the EMS manager. Upon completion, students should be able to understand the principles of managing emergency medical service delivery systems.

**EMS 240 Special Needs Patients (1-2-0-2)**

Prerequisites: Departmental Approval

Corequisites: None

This course includes concepts of crisis intervention and techniques of dealing with special needs patients and is required for paramedic certification. Topics include behavioral emergencies, abuse, assault, challenged patients, personal well-being, home care, and psychotherapeutic pharmacology. Upon completion, students should be able to recognize and manage frequently encountered special needs patients.

**EMS 241 EMS Clinical Practicum IV(0-0-9-3)**

Prerequisites: EMS 231

Corequisites: Current NC EMT Certification is required for students enrolling in this course.

This course is a continuation of the hospital and field internship required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to provide advanced-level patient care as an entry-level paramedic. Current NC EMT Certification is required for students enrolling in this course.

**EMS 250 Advanced Medical Emergencies (2-3-0-3)**

Prerequisites: BIO 168, EMS 120, EMS 130, EMS 131, EMS 210

Corequisites: EMS 221

This course provides an in-depth study of medical conditions frequently encountered in the pre-hospital setting and is required for paramedic certification. Topics include pulmonology, neurology, endocrinology, anaphylaxis, gastroenterology, toxicology, and environmental emergencies integrating case presentation and emphasizing pharmacotherapeutics. Upon completion, students should be able to recognize and manage frequently encountered medical conditions based upon initial patient impression.

**EMS 260 Advanced Trauma Emergencies (1-3-0-2)**

Prerequisites: BIO 168, EMS 120, EMS 121, EMS 130, EMS 131, EMS 210, EMS 220

Corequisites: EMS 221

This course provides in-depth study of trauma including pharmacological interventions for conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include hemorrhage control, shock, burns, and trauma to head, spine, soft tissue, thoracic, abdominal, and musculoskeletal areas with case presentations utilized for special problems situations. Upon completion, students should be able to recognize and manage trauma situations based upon patient impressions and should meet requirements of BTLS or PHTLS courses.

**EMS 270 Life Span Emergencies (2-2-0-3)**

Prerequisites: EMS 120, EMS 121, EMS 130, EMS 131, EMS 210, EMS 220, EMS 221, EMS 250, EMS 260

Corequisites: EMS 231

This course, required for paramedic certification, covers medical/ethical/legal issues and the spectrum of age-specific emergencies from conception through death. Topics include gynecological, obstetrical, neonatal, pediatric, and geriatric emergencies and pharmacological therapeutics. Upon completion, students should be able to recognize and treat age-specific emergencies and certify at the Pediatric Advanced Life Support Provider level.

**EMS 280 EMS Bridging Course (2-2-0-3)**

Prerequisites: CURRENT NC Paramedic Certification or Departmental Approval

Corequisites: None

This course is designed to bridge the knowledge gained in a continuing education paramedic program with the knowledge gained in an EMS curriculum program. Topics include patient assessment, documentation, twelve-lead ECG analysis, thrombolytic agents, cardiac pacing, and advanced pharmacology. Upon completion, students should be able to perform advanced patient assessment documentation using the problem oriented medical record format and manage complicated patients.

**EMS 285 EMS Capstone (1-3-0-2)**

Prerequisites: BIO 168, EMS 210, EMS 221

Corequisites: EMS 231

This course provides an opportunity to demonstrate problem-solving skills as a team leader in simulated patient scenarios and is required for paramedic certification. Emphasis is placed on critical thinking, integration of didactic and psychomotor skills, and effective performance in simulated emergency situations. Upon completion, students should be able to recognize and appropriately respond to a variety of EMS-related events.



## ENGLISH

### ENG 080 Writing Foundations (3-2-0-4)

Prerequisites: Appropriate test scores

Corequisites: None

This course introduces the writing process and stresses effective sentences. Emphasis is placed on applying the conventions of written English, reflecting standard usage and mechanics in structuring a variety of sentences. Upon completion, students should be able to write correct sentences and a unified, coherent paragraph.

### ENG 090 Composition Strategies (3-0-0-3)

Prerequisites: ENG 080

or appropriate placement test score

Corequisites: None

This course provides practice in the writing process and stresses effective paragraphs. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay.

### ENG 090A Comp Strategies Lab (0-2-0-1)

Prerequisites: ENG 080

or appropriate placement test score

Corequisites: ENG 090

This writing lab is designed to practice the skills introduced in ENG 090. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay.

### ENG 101 Applied Communications I (3-0-0-3)

Prerequisites: None

Corequisites: None

This course is designed to enhance reading and writing skills for the workplace. Emphasis is placed on technical reading, job-related vocabulary, sentence writing, punctuation, and spelling. Upon completion, students should be able to identify main ideas with supporting details and produce mechanically correct short writings appropriate to the workplace. *This is a diploma-level course.*

### ENG 111 Expository Writing (3-0-0-3)

Prerequisites: ENG 090, RED 090

Corequisites: None

This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition. This course is also available through the Virtual Learning Community (VLC).*

### ENG 112 Argument-Based Research (3-0-0-3)

Prerequisites: ENG 111

Corequisites: None

This course, the second in a series of two, introduces research techniques, documentation styles, and argumentative strategies. Emphasis is placed on analyzing data and incorporating research findings into documented argumentative essays and research projects. Upon completion, students should be able to summarize, paraphrase, interpret, and synthesize information from primary and secondary sources using standard research format and style. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition. This course is also available through the Virtual Learning Community (VLC).*

### ENG 113 Literature-Based Research (3-0-0-3)

Prerequisites: ENG 111

Corequisites: None

This course, the second in a series of two, expands the concepts developed in ENG 111 by focusing on writing that involves literature-based research and documentation. Emphasis is placed on critical reading and thinking and the analysis and interpretation of prose, poetry, and drama: plot, characterization, theme, cultural context, etc. Upon completion, students should be able to construct mechanically-sound, documented essays and research papers that analyze and respond to literary works. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition. This course is also available through the Virtual Learning Community (VLC).*

### ENG 114 Prof Research & Reporting (3-0-0-3)

Prerequisites: ENG 111

Corequisites: None

This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce well-designed business and professional written and oral presentations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition. This course is also available through the Virtual Learning Community (VLC).*

### ENG 125 Creative Writing I (3-0-0-3)

Prerequisites: ENG 111

Corequisites: None

This course is designed to provide students with the opportunity to practice the art of creative writing. Emphasis is placed on writing, fiction, poetry, and sketches. Upon completion, students should be able to craft and critique their own writing and critique the writing of others. *This course has been approved to satisfy the*



*Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ENG 131 Introduction to Literature (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: ENG 112, ENG 113 or ENG 114

This course introduces the principal genres of literature. Emphasis is placed on literary terminology, devices, structure, and interpretation. Upon completion, students should be able to analyze and respond to literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*

**ENG 231 American Literature I (3-0-0-3)**

Prerequisites: ENG 112, ENG 113 or ENG 114

Corequisites: None

This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*

**ENG 232 American Literature II (3-0-0-3)**

Prerequisites: ENG 112, ENG 113 or ENG 114

Corequisites: None

This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*

**ENG 241 British Literature I (3-0-0-3)**

Prerequisites: ENG 112, ENG 113 or ENG 114

Corequisites: None

This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*

**ENG 242 British Literature II (3-0-0-3)**

Prerequisites: ENG 112, ENG 113 or ENG 114

Corequisites: None

This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*

**ENG 272 Southern Literature (3-0-0-3)**

Prerequisites: ENG 112, ENG 113 or ENG 114

Corequisites: None

This course provides an analytical study of the works of several Southern authors. Emphasis is placed on the historical and cultural contexts, themes, aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**ENG 273 African-American Literature (3-0-0-3)**

Prerequisites: ENG 112, ENG 113 or ENG 414

Corequisites: None

This course provides a survey of the development of African-American literature from its beginnings to the present. Emphasis is placed on historical and cultural context, themes, literary traditions, and backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and respond to selected texts. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).*

**ENG 274 Literature by Women (3-0-0-3)**

Prerequisites: ENG 112, ENG 113 or ENG 114

Corequisites: None

This course provides an analytical study of the works of several women authors. Emphasis is placed on the historical and cultural contexts, themes and aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*



**FIRE PROTECTION  
TECHNOLOGY**

**FIP 120 Intro to Fire Protection (2-0-0-2)**

Prerequisites: None  
Corequisites: None

This course provides an overview of the history, development, methods, systems, and regulations as they apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and other related topics. Upon completion, students should be able to demonstrate a broad understanding of the fire protection field.

**FIP 124 Fire Prevention & Public Ed (3-0-0-3)**

Prerequisites: None  
Corequisites: None

This course introduces fire prevention concepts as they relate to community and industrial operations. Topics include the development and maintenance of fire prevention programs, educational programs, and inspection programs. Upon completion, students should be able to research, develop, and present a fire safety program to a citizens or industrial group.

**FIP 128 Detection & Investigation (3-0-0-3)**

Prerequisites: None  
Corequisites: None

This course covers procedures for determining the origin and cause of accidental and incendiary fires. Topics include collection and preservation of evidence, detection and determination of accelerants, courtroom procedure and testimony, and documentation of the fire scene. Upon completion, students should be able to conduct a competent fire investigation and present those findings to appropriate officials or equivalent.

**FIP 132 Building Construction (3-0-0-3)**

Prerequisites: None  
Corequisites: None

This course covers the principles and practices related to various types of building construction, including residential and commercial, as impacted by fire conditions. Topics include types of construction and related elements, fire resistive aspects of construction materials, building codes, collapse, and other related topics. Upon completion, students should be able to understand and recognize various types of construction and their positive or negative aspects as related to fire conditions.

**FIP 136 Inspections & Codes (3-0-0-3)**

Prerequisites: None  
Corequisites: None

This course covers the fundamentals of fire and building codes and procedures to conduct an inspection. Topics include review of fire and building codes, writing inspection reports, identifying hazards, plan reviews, site sketches, and other related topics. Upon completion, students should be able to conduct a fire code compliance inspection and produce a written report.

**FIP 140 Industrial Fire Protect (2-0-0-2)**

Prerequisites: None  
Corequisites: None

This course covers fire protection systems in industrial facilities. Topics include applicable health and safety standards, insurance carrier regulations, other regulatory agencies, hazards of local industries, fire brigade operation, and loss prevention programs. Upon completion, students should be able to prepare a procedure to plan, organize, and evaluate an industrial facility's fire protection

**FIP 144 Sprinklers & Auto Alarms (2-2-0-3)**

Prerequisites: None  
Corequisites: None

This course introduces various types of automatic sprinklers, standpipes, and fire alarm systems. Topics include wet or dry systems, testing and maintenance, water supply requirements, fire detection and alarm systems, and other related topics. Upon completion, students should be able to demonstrate a working knowledge of various sprinkler and alarm systems and required inspection and maintenance.

**FIP 152 Fire Protection Law (2-0-0-2)**

Prerequisites: None  
Corequisites: None

This course covers fire protection law. Topics include torts, legal terms, contracts, liability, review of case histories, and other related topics. Upon completion, students should be able to discuss laws, codes, and ordinances as they relate to fire protection.

**FIP 220 Fire Fighting Strategies (3-0-0-3)**

Prerequisites: None  
Corequisites: None

This course provides preparation for command of initial incident operations involving emergencies within both the public and private sector. Topics include incident management, fire-ground tactics and strategies, incident safety, and command/control of emergency operations. Upon completion, students should be able to describe the initial incident system as it relates to operations involving various emergencies in fire and non-fire situations.

**FIP 224 Instructional Methodology (3-0-0-3)**

Prerequisites: None  
Corequisites: None

This course covers the knowledge, skills, and abilities needed to train others in fire service operations. Topics include planning, presenting, and evaluating lesson plans, learning styles, use of media, communication, and other related topics. Upon completion, students should be able to meet all requirements of NFPA 1041 Fire Service Instructor Level Two.

**FIP 228 Local Govt Finance (2-0-0-2)**

Prerequisites: None  
Corequisites: None

This course introduces local governmental financial principles and practices. Topics include

**COURSE DESCRIPTIONS**



budget preparation and justification, revenue policies, statutory requirements, taxation, audits, and the economic climate. Upon completion, students should be able to comprehend the importance of finance as it applies to the operation of a department.

**FIP 230 Chem of Hazardous Mat I (5-0-0-5)**

Prerequisites: None

Corequisites: None

This course covers the evaluation of hazardous materials. Topics include use of the periodic table, hydrocarbon derivatives, placards and labels, parameters of combustion, and spill and leak mitigation. Upon completion, students should be able to demonstrate knowledge of the chemical behavior of hazardous materials.

**FIP 232 Hydraulics & Water Dist (2-2-0-3)**

Prerequisites: MAT 115

Corequisites: None

This course covers the flow of fluids through fire hoses, nozzles, appliances, pumps, standpipes, water mains, and other devices. Emphasis is placed on supply and delivery systems, fire flow testing, hydraulic calculations, and other related topics. Upon completion, students should be able to perform hydraulic calculations, conduct water availability tests, and demonstrate knowledge of water distribution systems.

**FIP 236 Emergency Management (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers the four phases of emergency management: mitigation, preparedness, response, and recovery. Topics include organizing for emergency management, coordinating for community resources, public sector liability, and the roles of government agencies at all levels. Upon completion, students should be able to demonstrate an understanding of comprehensive emergency management and the integrated emergency management system.

**FIP 240 Fire Service Supervision (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers supervisory skills and practices in the fire protection field. Topics include the supervisor's job, supervision skills, the changing work environment, managing change, organizing for results, discipline and grievances, and loss control. Upon completion, students should be able to demonstrate an understanding of the roles and responsibilities of the effective fire service supervisor.

**FIP 252 Apparatus Spec & Purch (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers the specification and purchase of fire apparatus. Emphasis is placed on NFPA standards for apparatus, recommended types of fire apparatus, purchase and bidding procedures, and the importance of specifications. Upon completion, students should be able to make internal

decisions, write specifications, and make recommendations for the purchase of major capital equipment.

**FIP 256 Munic Public Relations (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course is a general survey of municipal public relations and their effect on the governmental process. Topics include principles of public relations, press releases, press conferences, public information officers, image surveys, and the effects of perceived service on fire protection delivery. Upon completion, students should be able to manage the public relations functions of a fire service organization.

**FIP 276 Managing Fire Services (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an overview of fire department operative services. Topics include finance, staffing, equipment, code enforcement, management information, specialized services, legal issues, planning, and other related topics. Upon completion, students should be able to understand concepts and apply fire department management and operations principles.

## FRENCH

**FRE 111 Elementary French I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the fundamental elements of the French language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**FRE 112 Elementary French II (3-0-0-3)**

Prerequisites: FRE 111

Corequisites: None

This course is a continuation of FRE 111 focusing on the fundamental elements of the French language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate further cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**FRE 211 Intermediate French I (3-0-0-3)**

Prerequisites: FRE 112

Corequisites: None

This course provides a review and expansion of the essential skills of the French language.



Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

### **FRE 212 Intermediate French II (3-0-0-3)**

Prerequisites: FRE 211

Corequisites: None

This course is a continuation of FRE 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

## **GEOLOGY**

### **GEL 111 Introductory Geology(3-2-0-4)**

Prerequisites: RED 090 and MAT 070

Corequisites: None

This course introduces basic landforms and geological processes. Topics include rocks minerals, volcanoes, fluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

## **GEOGRAPHY**

### **GEO 111 World Regional Geography (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course introduces the regional concept which emphasizes the spatial association of people and their environment. Emphasis is placed on the physical, cultural, and economic systems that interact to produce the distinct regions of the earth. Upon completion, students should be able to describe variations in physical and cultural features of a region and demonstrate an understanding of their functional relationships. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

### **GEO 112 Cultural Geography (3-0-0-3)**

Prerequisites: RED 090 and ENG 090

Corequisites: None

This course is designed to explore the diversity of human cultures and to describe their share characteristics. Emphasis is placed on the characteristics, distribution, and complexity of earth's cultural patterns. Upon completion, students should be able to demonstrate an understanding of the

differences and similarities in human cultural groups. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

### **GEO 130 General Physical Geography (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces both the basic physical components that help shape the earth and the study of minerals, rocks, and evolution of landforms. Emphasis is placed on the geographic grid, cartography, weather, climate, mineral composition, fluvial processes, and erosion and deposition. Upon completion, students should be able to identify these components and processes and explain how they interact. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

### **GEO 131 Physical Geography I (3-2-0-4)**

Prerequisites: RED 090

Corequisites: None

This course introduces the basic physical components that help shape the earth. Emphasis is placed on the geographic grid, cartography, weather, climate, biogeography, and soils. Upon completion, students should be able to identify these components and explain how they interact. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **GEO 132 Physical Geography II (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces the study of minerals, rocks, evolution of landforms, and consequences of landscape change. Emphasis is placed on mineral composition, fluvial processes, erosion and deposition, glaciers, and coastal processes. Upon completion, students should be able to identify these components and processes and to explain how they interact. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## **GERMAN**

### **GER 111 Elementary German I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the fundamental elements of the German language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written German and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*



**GER 112 Elementary German II (3-0-0-3)**

Prerequisites: GER 111

Corequisites: None

This course is a continuation of GER 111 focusing on the fundamental elements of the German language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written German and demonstrate further cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**GER 181 German Lab 1 (0-2-0-1)**

Prerequisites: None

Corequisites: GER 111

This course provides an opportunity to enhance acquisition of the fundamental elements of the German language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written German and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**HEALTH****HEA 110 Personal Health/Wellness (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an introduction to basic personal health and wellness. Emphasis is placed on current health issues such as nutrition, mental health, and fitness. Upon completion, students should be able to demonstrate an understanding of the factors necessary to the maintenance of health and wellness. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**HEA 112 First Aid & CPR (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained. *This course has been approved for transfer through the Comprehensive Articulation Agreement. This course meets requirements for First Responder Training and American Heart Association guidelines including AED training.*

**HISTORY****HIS 111 World Civilizations I (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.*

**HIS 112 World Civilizations II (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.*

**HIS 114 Comparative World History (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course provides a comparison of western and non-western cultures. Emphasis is placed on historical developments and their impact on the modern world through religion, politics, economics, and social developments. Upon completion, students should be able to compare and contrast western and non-western cultures. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.*

**HIS 116 Current World Problems (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers current world events from an historical perspective. Topics include regional problems as well as international concerns. Upon completion, students should be able to analyze significant current world problems from an historical perspective. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**HIS 121 Western Civilization I (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces western civilization from pre-history to the early modern era. Topics include ancient Greece, Rome, and Christian institutions of the Middle Ages and the emergence of national monarchies in western Europe.



Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early western civilization. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

### **HIS 122 Western Civilization II (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces western civilization from the early modern era to the present. Topics include the religious wars, the Industrial Revolution, World Wars I and II, and the Cold War. Upon completion, students should be able to analyze significant political socioeconomic and cultural developments in modern western civilization. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

### **HIS 131 American History I (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

### **HIS 132 American History II (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

### **HIS 161 Science and Technology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course examines the history of science and technology from pre-history to the present. Topics include the origins, impact, and consequences of scientific and technological develop-

ments. Upon completion, students should be able to analyze significant developments in the history of science and technology. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **HIS 162 Women and History (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course surveys the experience of women in historical perspective. Topics include the experiences and contributions of women in culture, politics, economics, science, and religion. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural contributions of women in history. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **HIS 211 Ancient History (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course traces the development of the cultural, intellectual, and political foundations of western civilization. Topics include the civilizations of the Near East, the classical Greek and Hellenistic eras, the Roman world, Judaism, and Christianity. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the ancient world. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **HIS 212 Medieval History (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course traces the cultural, political, economic, social, religious, and intellectual history of Europe during the Middle Ages. Topics include the decline of the Roman Empire, the Frankish Kingdoms, the medieval church, feudalism, the rise of national monarchies, urbanization, and the rise of universities. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in medieval Europe. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **HIS 213 Modern Europe to 1815 (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course traces the cultural, political, economic, social, religious, and intellectual history of Europe from the end of the Middle Ages to 1815. Topics include the Renaissance, the Reformation, religious wars, absolutism, colonialism, the Scientific Revolution, the Enlightenment, the French Revolution, and Napoleon. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early modern Europe. *This course has*



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been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

## HIS 214 Modern Europe Since 1815 (3-0-0-3)

Prerequisites: RED 090

Corequisites: None

This course traces the history of Europe from 1815 to the present. Topics include the Congress of Vienna, the Revolutionary era, liberalism, socialism, imperialism, nationalism, World Wars I and II, and the Cold War. Upon completion, students should be able to analyze significant intellectual, political, socioeconomic, and cultural developments in modern Europe since 1815. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## HIS 221 African-American History (3-0-0-3)

Prerequisites: RED 090

Corequisites: None

This course covers African-American history from the Colonial period to the present. Topics include African origins, the slave trade, the Civil War, Reconstruction, the Jim Crow era, the civil rights movement, and contributions of African Americans. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the history of African Americans. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## HIS 236 North Carolina History (3-0-0-3)

Prerequisites: RED 090

Corequisites: None

This course is a study of geographical, political, economic, and social conditions existing in North Carolina from America's discovery to the present. Topics include native and immigrant backgrounds; colonial, antebellum, and Reconstruction periods; party politics; race relations; and the transition from an agrarian to an industrial economy. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in North Carolina. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## HUMANITIES

### HUM 101 Values in the Workplace (2-0-0-2)

Prerequisites: None

Corequisites: None

This course is a study of the influence of human values in the workplace and of the workplace on human values. Emphasis is placed on the ways in which the workplace affects and is affected by human values. Upon completion, students should be able to demonstrate a broad-based awareness and appreciation of the inter-connectedness between human values and the world of work. *This is a diploma-level course.*

### HUM 110 Technology and Society (3-0-0-3)

Prerequisites: RED 090

Corequisites: None

This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*

### HUM 115 Critical Thinking (3-0-0-3)

Prerequisites: RED 090 and ENG 111

Corequisites: None

This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on evaluating information, problem solving, approaching cross-cultural perspectives, and resolving controversies and dilemmas. Upon completion, students should be able to demonstrate orally and in writing the use of critical thinking skills in the analysis of appropriate texts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course may meet the SACS humanities requirement for AAS degree programs. This course is also available through the Virtual Learning Community (VLC).*

### HUM 150 American Women's Studies (3-0-0-3)

Prerequisites: None

Corequisites: None

This course provides an inter-disciplinary study of the history, literature, and social roles of American women from Colonial times to the present. Emphasis is placed on women's roles as reflected in American language usage, education, law, the workplace, and mainstream culture. Upon completion, students should be able to identify and analyze the roles of women as reflected in various cultural forms. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*

### HUM 160 Introduction to Film (2-2-0-3)

Prerequisites: None

Corequisites: None

This course introduces the fundamental elements of film artistry and production. Topics include film styles, history, and production techniques, as well as the social values reflected in film art. Upon completion, students should be able to critically analyze the elements covered in relation to selected films. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*



**HUM 230 Leadership Development (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: None

This course explores the theories and techniques of leadership and group process. Emphasis is placed on leadership styles, theories of group dynamics, and the moral and ethical responsibilities of leadership. Upon completion, students should be able to identify and analyze a personal philosophy and style of leadership and integrate these concepts in various practical situations.

**HYDRAULICS AND PNEUMATICS****HYD 110 Hydraulics/Pneumatics I (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application, and troubleshooting. Oral and written communications skills will be emphasized.

**INDUSTRIAL SYSTEMS TECHNOLOGY--**

See MNT

**INTERNATIONAL BUSINESS****INT 110 International Business (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an overview of the environment, concepts, and basic differences involved in international business. Topics include forms of foreign involvement, international trade theory, governmental influences on trade and strategies, international organizations, multinational corporations, personnel management, and international marketing. Upon completion, students should be able to describe the foundation of international business.

**INDUSTRIAL SCIENCE****ISC 112 Industrial Safety (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA and environmental regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment. Occupational health and safety topics relating to the modern industrial environment will be covered.

**ISC 128 Industrial Leadership (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces principles and techniques for managers in modern industry. Topics include

leadership traits, management principles and processes, managing conflict, group dynamics, team building, counseling, motivation, and communication. Upon completion, students should be able to understand and apply leadership and management principles in work situations.

**ISC 132 Mfg Quality Control (2-3-0-3)**

Prerequisites: MAT 080 or MAT 120

Corequisites: None

This course introduces quality concepts and techniques used in industry. Topics include elementary statistics and probability, process control, process capability, and quality improvement tools. Upon completion, students should be able to demonstrate an understanding of the concepts and principles of quality and apply them to the work environment.

**ISC 133 Mfg Management Practices (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers successful industrial organizations and management practices for improving quality and productivity. Topics include self-managed work teams, problem-solving skills, and production management techniques. Upon completion, students should be able to demonstrate an understanding of day-to-day plant operations, team management processes, and the principles of group dynamics.

**ISC 135 Principles of Industrial Mgmt (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the managerial principles and practices required for organizations to succeed in modern industry. Topics include the functions and roles of all levels of management, organization design, and planning and control of manufacturing operations. Upon completion, students should be able to demonstrate an understanding of management principles and integrate these principles into job situations.

**ISC 136 Productivity Analysis I (2-3-0-3)**

Prerequisites: MAT 080 or MAT 120

Corequisites: None

This course covers methods of measuring, analyzing, and improving productivity. Topics include methods analysis, standardized practices, process analysis, and human factors. Upon completion, students should be able to apply productivity improvement techniques.

**ISC 222 Project Planning/Control (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers how to plan, schedule and control projects typical in manufacturing and service industries. Topics include fundamental project management concepts and hands-on computer application experience with process flow charting and PERT/CPM project managers. Upon completion, students should be able to plan, schedule and control projects using state-of-the-art computer application programs.



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## **ISC 223 Quantitative Methods (3-0-0-3)**

Prerequisites: MAT 122

Corequisites: None

This course introduces the quantitative methods involved in operations management decision making. Topics include linear programming, forecasting techniques, inventory control, project management, decision analysis, and simulation modeling. Upon completion, students should be able to interpret quantitative results and demonstrate appropriate decision-making skills. Oral and written communications skills will be emphasized.

## **ISC 230 Simulation Prod Processes (1-3-0-2)**

Prerequisites: MAT 080 or MAT 120

Corequisites: None

This course introduces fundamental principles and procedures for simulation modeling of production processes. Emphasis is placed on problem-solving and engineering applications of simulation modeling for quality enhancement and productivity improvement. Upon completion, students should be able to analyze and model a production process to obtain optimum productive operations. Oral and written communications skills will be emphasized.

## **ISC 233 Industrial Org & Mgmt (3-0-0-3)**

Prerequisites: ISC 133 or ISC 128

Corequisites: None

This course covers advanced organization and management philosophies for organization improvement. Emphasis is placed on understanding comprehensive organization improvement concepts such as reengineering, MBQA, ISO 9000, and teams. Upon completion, students should be able to demonstrate an understanding of organizations and assess their strengths and weaknesses. Oral and written communications skills will be emphasized.

## **ISC 235 Management Problems (3-0-0-3)**

Prerequisites: ISC 135

Corequisites: None

This course covers problem-solving strategies for a variety of industrial management problems. Emphasis is placed on integrating management principles and practices in an industrial setting through a case-study approach. Upon completion, students should be able to analyze a variety of management problems and provide oral and/or written reports which include problem definition and recommendations. Oral and written communications skills will be emphasized.

## **ISC 236 Productivity Analysis II (2-3-0-3)**

Prerequisites: ISC 136

Corequisites: None

This course covers advanced process and system productivity improvement concepts. Topics include work measurement techniques, resource measurement and planning, team improvement concepts, and team productivity measurements. Upon completion, students should be able to demonstrate an understanding of advanced productivity concepts and apply advanced productivity improvement techniques to work situations.

## **ISC 237 Quality Management (2-3-0-3)**

Prerequisites: ISC 128 or BUS 137

Corequisites: None

This course covers the process by which successful manufacturing organizations achieve customer satisfaction in all processes in the organization. Topics include quality models and approaches, such as MBNQA, ISO 9000, benchmarking, and Deming's 14 Points, and the incorporation of SPC improvement techniques. Upon completion, students should be able to integrate SPC techniques with successful management practices for a comprehensive understanding of continuous quality improvement. Oral and written communications skills will be emphasized.

## **ISC 243 Prod & Oper Management I (2-3-0-3)**

Prerequisites: MAT 080 or MAT 120

Corequisites: None

This course introduces concepts used to analyze and solve productivity and operational problems. Topics include operations strategy, forecasting, resource allocation, and materials management. Upon completion, students should be able to recognize, analyze, and solve a variety of productivity and operational problems.

## **ISC 244 Prod & Oper Management II (2-3-0-3)**

Prerequisites: ISC 243

Corequisites: None

This course covers advanced production and operations management concepts, including the use of computer programs to analyze/solve manufacturing problems. Topics include systems analysis, resource allocation, cost control, and productivity improvement using advanced tools such as linear programming, ABC costing, manufacturing modeling, and manufacturing simulation. Upon completion, students should be able to recognize, analyze, and solve a variety of complex production and operations problems.

## **ISC 255 Engineering Economy (2-2-0-3)**

Prerequisites: MAT 080 or MAT 120

Corequisites: None

This course covers the process of economic evaluation of manufacturing industrial alternatives such as equipment selection, replacement studies, and cost reduction proposals. Topics include discounted cash flows, time value of money, income tax considerations, internal rates of return, and comparison of alternatives using computer programs. Upon completion, students should be able to analyze complex manufacturing alternatives based on engineering economy principles.

## **ISC 256 System Design (2-3-0-3)**

Prerequisites: Departmental Approval

Corequisites: ISC 236

This course incorporates all phases of industrial engineering into the comprehensive design of an industrial system. Emphasis is placed on developing project reports which reflect a comprehensive understanding of industrial engineering and the analytical tools used to plan work systems. Upon completion, students should be able to demonstrate a comprehensive knowledge of



industrial engineering through this capstone course. Oral and written communications skills will be emphasized.

## INTERNET TECHNOLOGIES

### ITN 140 Web Development Tools (2-2-0-3)

Prerequisites: CIS 172

Corequisites: None

This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites and supporting applets.

### ITN 150 Internet Protocols (2-2-0-3)

Prerequisites: CIS 172, CSC 160, and ITN 140

Corequisites: None

This course introduces the student to the application protocols used on the Internet. Topics include HTTP, Secure HTTP, TCP/IP, and related applications such as FTP, TELNET, and PING. Upon completion, students should be able to use the protocols as they pertain to the Internet as well as setup and maintain these protocols.

### ITN 160 Principles of Web Design (2-2-0-3)

Prerequisites: CIS 172, CSC 160, and ITN 140

Corequisites: None

The course introduces intermediate to advanced web page design techniques. Topics include effective use of graphics, fonts, colors, navigation tools, advanced markup language elements, as well as a study of bad design techniques. Upon completion, students should be able to employ advanced design techniques to create high impact and highly functional web pages.

### ITN 170 Introduction to Internet Databases (2-2-0-3)

Prerequisites: CSC 139, CSC 160, ITN 140, ITN 150, ITN 160, and ITN 180

Corequisites: ITN 260

This is the first of two courses introducing the use of databases to store, retrieve and query data through HTML forms. Topics include database design for Internet database, use of ODBC-compliant databases. Upon completion, students should be able to create and maintain a database that will collect, query and report on data via an HTML form.

### ITN 180 Active Server Programming (2-2-0-3)

Prerequisites: CIS 153 and CSC 160

Corequisites: None

This course introduces Active Server Programming. Topics include Jscript, VBScript, HTML forms processing, and the Active Server Object Model. Upon completion, students should be able to create and maintain Active Server applications.

### ITN 260 Intro to E-Commerce (2-2-0-3)

Prerequisites: CSC 139, CSC 160, ITN 140,

ITN 150, ITN 160 and ITN 180

Corequisites: ITN 170

This course introduces the concepts and tools to implement electronic commerce via the Internet. Topics include application and server software selection, security transactions, uses and verification of credit cards, publishing of catalogs, and site administration. Upon completion, students should be able to set up a working e-commerce Internet web-site.

## JEWELRY DESIGN - See Art

## LEGAL EDUCATION

### LEX 110 Introduction to Paralegal Study (3-0-0-3)

Prerequisites: ENG 090

Corequisites: None

This course introduces the paralegal profession and the legal system, and an emphasis is placed on the role of professional and legal ethics. Topics include regulations, ethics, case analysis, legal reasoning, career opportunities, professional organizations, terminology and other related topics. Upon completion, the student should be able to explain the role of a paralegal and identify the skills, knowledge, and ethics required of paralegals. *This course is also available through the Virtual Learning Community (VLC).*

### LEX 120 Legal Research/Writing I (2-2-0-3)

Prerequisites: ENG 111

Corequisites: None

This course introduces the techniques of legal research and writing. Emphasis is placed on locating, analyzing, applying, and updating sources of law; effective legal writing, including proper citation; and the use of electronic research methods. Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course. *This course is also available through the Virtual Learning Community (VLC).*

### LEX 121 Legal Research/Writing II (2-2-0-3)

Prerequisites: ENG 111 and LEX 120

Corequisites: None

This course covers advanced topics in legal research and writing. Topics include more complex legal issues and assignments involving preparation of legal memos, briefs, and other documents and the advanced use of electronic research methods. Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course.

### LEX 130 Civil Injuries (3-0-0-3)

Prerequisites: ENG 090

Corequisites: None

This course covers traditional tort concepts and the evolving body of individual rights created by statute. Topics include intentional and non intentional torts with emphasis on negligence, strict



liability, civil rights, workplace and environmental liability, remedies, and damages. Upon completion, students should be able to recognize, explain, and evaluate elements of civil injuries and related defenses.

#### **LEX 140 Civil Litigation I (3-0-0-3)**

Prerequisites: ENG 090

Corequisites: None

This course introduces the structure of the legal system and the rules governing civil litigation. Topics include jurisdiction, state and federal rules of civil procedure and evidence. Upon completion, students should be able to assist an attorney in the preparation of pleadings and motions.

#### **LEX 141 Civil Litigation II (2-2-0-3)**

Prerequisites: LEX 140

Corequisites: None

This course covers advanced topics in the civil litigation process. Topics include motions, discovery, and trial and appellate procedures. Upon completion, students should be able to assist an attorney in preparing and organizing documents for trial, settlement and post-trial practice.

#### **LEX 150 Commercial Law I (2-2-0-3)**

Prerequisites: ENG 090

Corequisites: None

This course covers legally enforceable agreements, forms of organization, and selected portions of the Uniform Commercial Code. Topics include drafting and enforcement of contracts, leases, and related documents and selection and implementation of business organization forms, sales, and commercial papers. Upon completion, students should be able to apply the elements of a contract, prepare various business documents, and understand the role of commercial paper.

#### **LEX 160 Criminal Law & Procedure (2-2-0-3)**

Prerequisites: ENG 090

Corequisites: None

This course introduces substantive criminal law and procedural rights of the accused. Topics include elements of state/federal crimes, defenses, constitutional issues, pre-trial and trial process, and other related topics. Upon completion, students should be able to explain elements of specific crimes and assist an attorney in preparing a criminal case.

#### **LEX 170 Administrative Law (2-0-0-2)**

Prerequisites: ENG 090

Corequisites: None

This course covers the scope, authority, and regulatory operations of various federal, state, and local administrative agencies. Topics include social security, worker's compensation, unemployment, zoning, and other related topics. Upon completion, students should be able to research sources of administrative law, investigate, and assist in representation of clients before administrative agencies.

#### **LEX 198 Seminar in Legal Education (3-0-0-3)**

Prerequisites: ENG 090

Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

#### **LEX 210 Real Property I (3-0-0-3)**

Prerequisites: ENG 090

Corequisites: None

This course introduces the study of real property law. Topics include the distinction between real and personal property, various estates, mechanics of conveyance and encumbrance, recordation, special proceedings, and other related topics. Upon completion, students should be able to identify estates, forms of deeds, requirements for recording, and procedures to enforce rights to real property. *This course is also available through the Virtual Learning Community (VLC).*

#### **LEX 211 Real Property II (1-4-0-3)**

Prerequisites: LEX 210

Corequisites: None

This course continues the study of real property law relating to title examination and preparation of closing documents. Topics include use of courthouse and other public records in title examination and preparation of documents required in real estate transactions and closings. Upon completion, students should be able to plot/draft a description, perform complete title examination, draft closing documents including title insurance forms, and prepare disbursement reconciliation.

#### **LEX 220 Corporate Law (2-0-0-2)**

Prerequisites: ENG 090

Corequisites: None

This course covers the legal aspects of forming, operating, and maintaining a business. Emphasis is placed on the business corporation with additional coverage of sole proprietorships and partnerships. Upon completion, students should be able to draft basic partnership and corporate documents and file these documents as required.

#### **LEX 240 Family Law (3-0-0-3)**

Prerequisites: ENG 090

Corequisites: None

This course covers laws governing domestic relations. Topics include marriage, separation, divorce, child custody, support, property division, adoption, domestic violence, and other related topics. Upon completion, students should be able to interview clients, gather information, and draft documents related to family law. *This course is also available through the Virtual Learning Community (VLC).*



**LEX 250 Wills, Estates, & Trusts (2-2-0-3)**

Prerequisites: ENG 090

Corequisites: None

This course covers various types of wills, trusts, probate, estate administration, and intestacy. Topics include types of wills and execution requirements, caveats and dissents, intestate succession, inventories and accountings, distribution and settlement, and other related topics. Upon completion, students should be able to draft simple wills, prepare estate forms, understand administration of estates including taxation, and explain terms regarding trusts.

**LEX 260 Bankruptcy & Collections (3-0-0-3)**

Prerequisites: ENG 090

Corequisites: None

This course provides an overview of the laws of bankruptcy and the rights of creditors and debtors. Topics include bankruptcy procedures and estate management, attachment, claim and delivery, repossession, foreclosure, collection, garnishment, and post-judgment collection procedure. Upon completion, students should be able to prepare and file bankruptcy forms, collection letters, statutory liens, and collection of judgments.

**LEX 270 Law Office Mgt/Technology (1-2-0-2)**

Prerequisites: ENG 090

Corequisites: None

This course provides an overview of law office management and organization. Topics include office forms, filing systems, billing/time keeping, computer systems, calendar systems, library administration, case management, office/personnel procedures, ethics, and technology. Upon completion, students should be able to establish and maintain various law office systems, monitor case progress, and supervise non-lawyer personnel.

**LEX 280 Ethics & Professionalism (2-0-0-2)**

Prerequisites: ENG 090

Corequisites: None

This course covers various aspects of civil and criminal investigation. Topics include locating witnesses, interviewing techniques, obtaining records, sketching and photographing accident scenes, collecting and preserving evidence, and preparation of exhibits for trial. Upon completion, students should be able to locate witnesses, prepare questionnaires, interview witnesses, obtain criminal/motor vehicle/medical/accident records, sketch scenes, and prepare exhibits.

**LEX 287 CLA Review Seminar (2-0-0-2)**

Prerequisites: LEX 210

Corequisites: None

This course is designed to prepare students for voluntary national certification sponsored by the National Association of Legal Assistants to demonstrate significant competencies in paralegalism. Topics include Communications, Ethics, Human Relations, Interviewing Techniques, Judgment and Analytical Analysis, Legal Research, Legal Terminology, General Law and

nine tested specialty areas of law. Upon completion, students should be able to demonstrate that they are eligible to take the NALA's Certified Legal Assistant Exam.

**LEX 288 Elder Law(3-0-0-3)**

Prerequisites: LEX 211

Corequisites: None

This course provides an overview of laws especially relevant to older persons. Topics include healthcare decision-making, living wills, powers of attorney, financial and estate planning, government benefits, housing issues, elder abuse, and ethical considerations. Upon completion, students should be able to describe the methods for assisting attorneys in addressing legal issues pertinent to the elderly.

**LOGISTICS MANAGEMENT****LOG 110 Introduction to Logistics (3-0-0-3)**

Prerequisites: None

Corequisites: None

The course provides an overview of logistics. Topics include traffic management, warehousing, inventory control, material handling, global logistics, and the movement and storage of goods from raw materials sources to end consumers. Upon completion, students should be able to identify the different segments of logistics and use the terminology of the industry.

**LOG 120 Global Logistics (3-0-0-3)**

Prerequisites: LOG 110

Corequisites: None

This course examines logistics operations, processes, and modes of transportation in an interdependent world economy. Emphasis is placed on freight forwarding operations, analyzing and selecting transportation modes, and processing of import/export documentation. Upon completion students should be able to arrange and coordinate the transportation of products globally. *This course is a unique concentration requirement of the Logistics Management concentration in the Business Administration program.*

**LOG 210 Fleet Management (3-0-0-3)**

Prerequisites: LOG 110

Corequisites: None

This course covers the management of transportation, fleet operations, and safety. Emphasis is placed on DOT safety regulations in the hiring, training, and supervision of drivers in transportation. Upon completion, students should be able to write a safety program for drivers involved in interstate commerce following DOT regulations. This course is a unique concentration requirement of the Logistics Management concentration in the Business Administration program.

**LOG 220 Logistics Management (3-0-0-3)**

Prerequisites: LOG 110

Corequisites: None

This course covers the management of the movement and storage of goods and analysis of total



costs involved. Emphasis is placed on the monitoring of inventory using automated systems, managing the storage function, warehousing, and distribution. Upon completion, students should be able to describe warehousing and facility layouts, identify material handling methods, and apply inventory control procedures. This course is a unique concentration requirement of the Logistics Management concentration in the Business Administration program.

### **LOG 230 Transportation Management (3-0-0-3)**

Prerequisites: LOG 110

Corequisites: None

This course covers the function of shippers and carriers in the transportation industry. Emphasis is placed on negotiating price and service requirements in the movement of goods, identifying areas of carrier liability, and the methods for processing claims. Upon completion, students should be able to compare common carriers and company operated transportation for service and cost, interpret pricing structures, and determine carrier liability. *This course is a unique concentration requirement of the Logistics Management concentration in the Business Administration program.*

## **MACHINE TECHNOLOGY**

### **MAC 111 Machining Technology I (2-12-0-6)**

Prerequisites: None

Corequisites: None

This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform the basic operations of measuring, layout, drilling, sawing, turning, and milling.

### **MAC 112 Machining Technology II (2-12-0-6)**

Prerequisites: MAC 111

Corequisites: None

This course provides additional instruction and practice in the use of precision measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection and use of work holding devices, speeds, feeds, cutting tools, and coolants. Upon completion, students should be able to perform basic procedures on precision grinders and advanced operations of measuring, layout, drilling, sawing, turning, and milling.

### **MAC 113 Machining Technology III (2-12-0-6)**

Prerequisites: MAC 112

Corequisites: None

This course provides an introduction to advanced and special machining operations. Emphasis is placed on working to specified tolerances with special and advanced setups. Upon completion, students should be able to produce a part to specifications.

### **MAC 114 Intro to Metrology (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the care and use of precision measuring instruments. Emphasis is placed on the inspection of machine parts and use of a wide variety of measuring instruments. Upon completion, students should be able to demonstrate the correct use of measuring instruments.

### **MAC 121 Intro to CNC (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the concepts and capabilities of computer numerical control machine tools. Topics include setup, operation, and basic applications. Upon completion, students should be able to explain operator safety, machine protection, data input, program preparation, and program storage.

### **MAC 122 CNC Turning (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers. The primary focus will be on the Fanuc series 0 control and supporting G-codes.

### **MAC 124 CNC Milling (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the manual programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC machining centers.

### **MAC 222 Advanced CNC Turning (1-3-0-2)**

Prerequisites: MAC 122

Corequisites: None

This course covers advanced methods in setup and operation of CNC turning centers. Emphasis is placed on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC turning centers. The primary focus will be on the Mazatrol programming format and control.

### **MAC 224 Advanced CNC Milling (1-3-0-2)**

Prerequisites: MAC 124

Corequisites: None

This course covers advanced methods in setup and operation of CNC machining centers. Emphasis is placed on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC machining centers.



**MAC 231 CNC Graphics Prog: Turning (1-4-0-3)**

Prerequisites: MAC 121

Corequisites: None

This course introduces Computer Numerical Control graphics programming and concepts for turning center applications. Emphasis is placed on the interaction of menus to develop a shape file in a graphics CAM system and to develop tool path geometry and part geometry. Upon completion, students should be able to develop a job plan using CAM software, include machine selection tool selection, operational sequence, speed, feed and cutting depth.

**MAC 232 CNC Graphics Prog: Milling (1-4-0-3)**

Prerequisites: MAC 124

Corequisites: None

This course introduces Computer Numerical Control graphics programming and concepts for machining center applications. Emphasis is placed on developing a shape file in a graphics CAM system and transferring coded information from CAM graphics to the CNC milling center. Upon completion, students should be able to develop a complete job plan using CAM software to create a multi-axis CNC program.

**MAC 243 Die Making I (2-6-0-4)**

Prerequisites: MAC 112 Corequisites: None This course introduces the principles and applications of die making. Topics include types, construction, and application of dies. Upon completion, students should be able to design and build simple dies.

**MAC 245 Mold Construction I (2-6-0-4)**

Prerequisites: MAC 112

Corequisites: None

This course introduces the principles of mold making. Topics include types, construction, and application of molds. Upon completion, students should be able to design and build simple molds.

**MATH****MAT 060 Essential Mathematics (3-2-0-4)**

Prerequisites: appropriate test scores

Corequisites: None

This course is a comprehensive study of mathematical skills which should provide a strong mathematical foundation to pursue further study. Topics include principles and applications of decimals, fractions, percents, ratio and proportion, order of operations, geometry, measurement, and elements of algebra and statistics. Upon completion, students should be able to perform basic computations and solve relevant, multi-step mathematical problems using technology where appropriate.

**MAT 070 Introductory Algebra (3-2-0-4)**

Prerequisites: MAT 060

or appropriate placement test score

Corequisites: RED 080

or appropriate placement test score

This course establishes a foundation in algebraic concepts and problem solving. Topics include signed numbers, exponents, order of operations, simplifying expressions, solving linear equations and inequalities, graphing, formulas, polynomials, factoring, and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology. *This course is also available through the Virtual Learning Community (VLC).*

**MAT 080 Intermediate Algebra (3-2-0-4)**

Prerequisites: MAT 070

or appropriate placement test score

Corequisites: RED 080

or appropriate placement test score

This course continues the study of algebraic concepts with emphasis on applications. Topics include factoring; rational expressions; rational exponents; rational, radical, and quadratic equations; systems of equations; inequalities; graphing; functions; variations; complex numbers; and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology.

**MAT 101 Applied Mathematics I (2-2-0-3)**

Prerequisites: MAT 060

Corequisites: None

This course is a comprehensive review of arithmetic with basic algebra designed to meet the needs of certificate and diploma programs. Topics include arithmetic and geometric skills used in measurement, ratio and proportion, exponents and roots, applications of percent, linear equations, formulas, and statistics. Upon completion, students should be able to solve practical problems in their specific areas of study. *This course is intended for diploma programs.*

**MAT 110 Mathematical Measurement (2-2-0-3)**

Prerequisites: MAT 070

Corequisites: None

This course provides an activity-based approach to utilizing, interpreting, and communicating data in a variety of measurement systems. Topics include accuracy, precision, conversion, and estimation within metric, apothecary, and avoirdupois systems; ratio and proportion; measures of central tendency and dispersion; and charting of data. Upon completion, students should be able to apply proper techniques to gathering, recording, manipulating, analyzing, and communicating data.

**MAT 115 Mathematical Models (2-2-0-3)**

Prerequisites: MAT 070

Corequisites: None

This course develops the ability to utilize mathematical skills and technology to solve problems at a level found in non-mathematics intensive



programs. Topics include applications to percent, ratio and proportion, formulas, statistics, functional notation, linear functions, probability, sampling techniques, scatter plots, and modeling. Upon completion, students should be able to solve practical problems, reason and communicate with mathematics, and work confidently, collaboratively, and independently. *This course is also available through the Virtual Learning Community (VLC).*

### **MAT 120 Geometry and Trigonometry (2-2-0-3)**

Prerequisites: MAT 070

Corequisites: None

This course introduces the concepts of plane trigonometry and geometry with emphasis on applications to problem solving. Topics include the basic definitions and properties of plane and solid geometry, area and volume, right triangle trigonometry, and oblique triangles. Upon completion, students should be able to solve applied problems both independently and collaboratively using technology.

### **MAT 121 Algebra/Trigonometry I (2-2-0-3)**

Prerequisites: MAT 120

Corequisites: None

This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include simplification, evaluation, and solving of algebraic and radical functions; complex numbers; right triangle trigonometry; systems of equations; and the use of technology. Upon completion, students should be able to demonstrate an understanding of the use of mathematics and technology to solve problems and analyze and communicate results.

### **MAT 122 Algebra/Trigonometry II (2-2-0-3)**

Prerequisites: MAT 121

Corequisites: None

This course extends the concepts covered in

MAT 121 to include additional topics in algebra, function analysis, and trigonometry. Topics include exponential and logarithmic functions, translation and scaling of functions, Sine Law, Cosine Law, vectors and statistics. Upon completion, students should be able to demonstrate an understanding of the use of technology to solve problems and to analyze and communicate results.

### **MAT 140 Survey of Mathematics (3-0-0-3)**

Prerequisites: MAT 070

Corequisites: None

This course provides an introduction in a non-technical setting to selected topics in mathematics. Topics may include, but are not limited to, sets, logic, probability, statistics, matrices, mathematical systems, geometry, topology, mathematics of finance, and modeling. Upon completion, students should be able to understand a variety of mathematical applications, think logically,

and be able to work collaboratively and independently. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. This course is also available through the Virtual Learning Community (VLC).*

### **MAT 151 Statistics I(3-0-0-3)**

Prerequisites: MAT 080, RED 090

Corequisites: MAT 151A

This course provides a project-based approach to the study of basic probability, descriptive and inferential statistics, and decision making. Emphasis is placed on measures of central tendency and dispersion, correlation, regression, discrete and continuous probability distributions, quality control, population parameter estimation, and hypothesis testing. Upon completion, students should be able to describe important characteristics of a set of data and draw inferences about a population from sample data. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. This course is also available through the Virtual Learning Community (VLC).*

### **MAT 15 IA Statistics I Lab (0-2-0-1)**

Prerequisites: MAT 080

Corequisites: MAT 151

This course is a laboratory for MAT 15 1. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **MAT 155 Statistical Analysis (3-0-0-3)**

Prerequisites: MAT 080 or MAT 090

Corequisites: None

This course is an introduction to descriptive and inferential statistics. Topics include sampling, distributions, plotting data, central tendency, dispersion, Central Limits Theorem, confidence intervals, hypothesis testing, correlations, regressions, and multinomial experiments. Upon completion, students should be able to describe data and test inferences about populations using sample data. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirements in natural sciences/mathematics (Quantitative Option).*

### **MAT 155A Statistics Analysis Lab (0-2-0-1)**

Prerequisites: MAT 080 or MAT 090

Corequisites: MAT 155

This course is a laboratory for MAT 155. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*



**MAT 161 College Algebra (3-0-0-3)**

Prerequisites: MAT 080

Corequisites: None

This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on applications involving equations and inequalities; polynomial, rational, exponential and logarithmic functions; and graphing and data analysis/modeling. Upon completion, students should be able to choose an appropriate model to fit a data set and use the model for analysis and prediction. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics for the Associate in Arts Degree. This course is also available through the Virtual Learning Community (VLC).*

**MAT 161A College Algebra Lab (0-2-0-1)**

Prerequisites: MAT 080

Corequisites: MAT 161

This course is a laboratory for MAT 161. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**MAT 167 Discrete Mathematics (3-0-0-3)**

Prerequisites: MAT 121, MAT 161, MAT 171, or MAT 280

Corequisites: None

This course is a study of discrete mathematics with emphasis on applications. Topics include number systems, combinations/permutations, mathematical logic/proofs, sets/counting, Boolean algebra, mathematical induction, trees/graphs, and algorithms. Upon completion, students should be able to demonstrate competence in the topics covered. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

**MAT 175 Precalculus (4-0-0-4)**

Prerequisites: MAT 161 and MAT 161A, or departmental approval

Corequisites: MAT 175A

This course provides an intense study of the topics which are fundamental to the study of calculus. Emphasis is placed on functions and their graphs with special attention to polynomial, rational, exponential, logarithmic and trigonometric functions, and analytic trigonometry. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Graphing calculators will be used to investigate the above topics as well as other topics.*

**MAT 175A Precalculus Lab (0-2-0-1)**

Prerequisites: None

Corequisites: MAT 175

This course is a laboratory for MAT 175. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**MAT 223 Applied Calculus (2-2-0-3)**

Prerequisites: MAT 122

Corequisites: None

This course provides an introduction to the calculus concepts of differentiation and integration by way of application and is designed for engineering technology students. Topics include limits, slope, derivatives, related rates, areas, integrals, and applications. Upon completion, students should be able to demonstrate an understanding of the use of calculus and technology to solve problems and to analyze and communicate results.

**MAT 252 Statistics II (3-0-0-3)**

Prerequisites: MAT 151 and either MAT 121 or MAT 161

Corequisites: MAT 252A

This course provides a technology-based treatment of multiple sample inferential statistics. Emphasis is placed on two sample hypothesis tests and confidence intervals, linear and multiple regression, analysis of variance, experimental design, and nonparametric techniques. Upon completion, students should be able to draw statistical inferences on multiple sample data taken from business and health, social, natural, and applied sciences. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**MAT 252A Statistics II Lab (0-2-0-1)**

Prerequisites: MAT 151, MAT 121, MAT 161

Corequisites: MAT 252

This course is a laboratory for MAT 252. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**MAT 263 Brief Calculus (3-0-0-3)**

Prerequisites: MAT 161 or MAT 175

Corequisites: MAT 263A

This course introduces concepts of differentiation and integration and their applications to solving problems; the course is designed for students needing one semester of calculus. Topics include functions, graphing, differentiation, and integration with emphasis on applications drawn from



business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Graphing calculators will be used to investigate applications involving the above topics.*

#### **MAT 263A Brief Calculus Lab (0-2-0-1)**

Prerequisites: MAT 161 or MAT 175

Corequisites: MAT 263

This course is a laboratory for MAT 263. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

#### **MAT 271 Calculus I (3-2-0-4)**

Prerequisites: MAT 175

Corequisites: None

This course covers in depth the differential calculus portion of a three-course calculus sequence. Topics include limits, continuity, derivatives, and integrals of algebraic and transcendental functions of one variable, with applications. Upon completion, students should be able to apply differentiation and integration techniques to algebraic and transcendental functions. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Graphing calculators will be used to investigate applications involving the above topics.*

#### **MAT 272 Calculus II (3-2-0-4)**

Prerequisites: MAT 271

Corequisites: None

This course provides a rigorous treatment of integration and is the second calculus course in a three-course sequence. Topics include applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to use integration and approximation techniques to solve application problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Graphing calculators will be used to investigate applications involving the above topics.*

#### **MAT 273 Calculus III (3-2-0-4)**

Prerequisites: MAT 272

Corequisites: None

This course covers the calculus of several variables and is third calculus course in a three-course sequence. Topics include functions of several variables, partial derivatives, multiple

integrals, solid analytical geometry, vector-valued functions, and line and surface integrals. Upon completion, students should be able to solve problems involving vectors and functions of several variables. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Graphing calculators will be used to investigate applications involving the above topics.*

#### **MAT 280 Linear Algebra (3-0-0-3)**

Prerequisites: MAT 271

Corequisites: None

This course provides a study of linear algebra topics with emphasis on the development of both abstract concepts and applications. Topics include vectors, systems of equations, matrices, determinants, vector spaces, linear transformations in two or three dimensions, eigenvectors, eigenvalues, diagonalization and orthogonality. Upon completion, students should be able to demonstrate both an understanding of the theoretical concepts and appropriate use of linear algebra models to solve application problems. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

#### **MAT 285 Differential Equations (3-0-0-3)**

Prerequisites: MAT 272

Corequisites: None

This course provides an introduction to ordinary differential equations with an emphasis on applications. Topics include first-order, linear higher-order, and systems of differential equations; numerical methods; series solutions; eigenvalues and eigenvectors; Laplace transforms; and Fourier series. Upon completion, students should be able to use differential equations to model physical phenomena, solve the equations, and use the solutions to analyze the phenomena. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

### **MECHANICAL TECHNOLOGY**

#### **MEC 111 Machine Processes I (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course introduces safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include safety, measuring tools, and the basic setup and operation of lathes, milling machines, drill presses, and saws. Upon completion, students should be able to manufacture a simple part to a specified tolerance. Other topics to be covered include non-destructive inspection and testing; work holding devices, and machining centers.

#### **MEC 112 Machine Processes II (2-3-0-3)**

Prerequisites: MEC 111

Corequisites: None

This course covers advanced use of milling machines and lathes. Emphasis is placed on safety and compound setup of milling machines and



lathes for manufacture of projects with a specified fit. Upon completion, students should be able to demonstrate proper procedures for manufacture of assembled parts.

### **MEC 145 Mfg Materials I (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course introduces a variety of manufacturing materials and common processing techniques. Emphasis is placed on the processing, testing, and application of materials such as wood, metals, plastics, ceramics, and composites. Upon completion, students should be able to demonstrate an understanding of fundamental engineering applications for a variety of materials, including their process capabilities and limitations.

### **MEC 161 Manufacturing Processes I (3-0-0-3)**

Prerequisites: None

Corequisites: MEC 161A

This course provides the fundamental principles of value-added processing of materials into usable forms for the customer. Topics include material properties and traditional and non-traditional manufacturing processes. Upon completion, students should be able to specify appropriate manufacturing processing for common engineering materials.

### **MEC 161A Manufacturing Processes I Lab (0-3-0-1)**

Prerequisites: None

Corequisites: MEC 161

This course is a laboratory for MEC 161. Emphasis is placed on experiences that enhance the materials presented in MEC 161. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in MEC 161.

### **MEC 180 Engineering Materials (2-3-0-3)**

Prerequisites: MEC 145

Corequisites: None

This course covers the physical and mechanical properties of materials. Topics include testing, heat treating, ferrous and non-ferrous metals, plastics, composites, and material selection. Upon completion, students should be able to specify basic tests and properties and select appropriate materials on the basis of specific properties. Further topics include iron-carbon phase diagrams, ITT diagrams, and processes concerning metallurgical transformation; oral and written communications skills will be emphasized.

### **MEC 210 Materials-Stress Analysis (1-2-0-2)**

Prerequisites: MAT 121

Corequisites: None

This course is a study of the principles and analysis of stress within machines and structural elements. Emphasis is placed on various types of loads including static, impact, varying, and dynamic loads. Upon completion, students should be able to demonstrate proficiency in

analyzing stress in mechanical joints, welds, beams, and columns.

### **MEC 245 Mfg Materials II (2-3-0-3)**

Prerequisites: MEC 145

Corequisites: None

This course covers advanced materials and processing techniques used in modern manufacturing. Emphasis is placed on processing, testing, and application of materials such as polymers, ceramics, and coatings and nontraditional manufacturing processes. Upon completion, students should be able to demonstrate a comprehensive understanding of modern manufacturing processes, engineering materials, and production systems.

### **MEC 250 Statics & Strength of Materials (4-3-0-5)**

Prerequisites: PHY 131 or PHY 151

Corequisites: None

This course covers the concepts and principles of statics and stress analysis. Topics include systems of forces on structures in equilibrium and analysis of stresses and strains on these components. Upon completion, students should be able to analyze forces and the results of stresses and strains on structural components.

### **MEC 265 Fluid Mechanics (2-2-0-3)**

Prerequisites: PHY 131

Corequisites: None

This course covers the physical behavior of fluids and fluid systems. Topics include fluid statics and dynamics, laminar and turbulent flow, Bernoulli's Equation, components, applications, and other related topics. Upon completion, students should be able to apply fluid power principles to practical applications.

### **MEC 267 Thermal Systems (2-2-0-3)**

Prerequisites: PHY 131 or PHY 151

Corequisites: None

This course introduces the fundamental laws of thermodynamics. Topics include work and energy, open and closed systems, and heat engines. Upon completion, students should be able to demonstrate a knowledge of the laws and principles that apply to thermal power. Additional topics covered are properties of steam, use of steam tables, specific heat and entropy changes of ideal gases, and vapor power cycles in Camot, Otto, and Rankine.

### **MEC 270 Machine Design (3-3-0-4)**

Prerequisites: DFT 151, MEC 180  
and MEC 250

Corequisites: None

This course covers the basic principles underlying design and selection of machine elements. Topics include stress analysis, selection of components, power transmission, and other design considerations. Upon completion, students should be able to identify and solve mechanical design problems by applying basic engineering principles. Other topics are design and application of machine components such as shafts, belt drives, bearings, chain drives, clutches, couplings, and gears.



**MEC 275 Engineering Mechanisms (2-2-0-3)**

Prerequisites: DFT 151 and PHY 131  
or PHY151

Corequisites: None

This course covers plane motion and devices used to generate plane motion. Topics include analysis of displacement, velocity, acceleration, gears, cams, and other mechanical systems. Upon completion, students should be able to graphically and mathematically analyze a plane motion system. Other topics include analysis of velocity and acceleration of linkages using relative velocity and instant center methods; use of software to analyze mechanisms.

**MEC 281 Electronic Mfg Processes (3-3-0-4)**

Prerequisites: MEC 161 or MEC 145

Corequisites: None

This course introduces electronic manufacturing processes. Topics include PCB manufacturing, artwork, clean room processing, environmental concerns, reliability, soldering, material issues, flexible circuits, connections, and electronic assembly. Upon completion, students should be able to demonstrate an understanding of basic electronic processing and be able to process simple electronic devices. Oral and written communications skills will be emphasized.

**MEC 283 Introduction to CAM (2-3-0-3)**

Prerequisites: MEC 112 and DFT 111

Corequisites: None

This course introduces the major concepts of a computer-aided manufacturing system. Topics including linking CAD to CAM, software, programming, and machine codes. Upon completion, students should be able to write a program to a simple part using a CAD input file. Oral and written communications skills will be emphasized,

**MEDICAL ASSISTING****MED 110 Orientation to Medical Assisting (1-0-0-0-1)**

Prerequisites: None

Corequisites: None

This course covers the history of medicine and the role of the medical assistant in the health care setting. Emphasis is placed on professionalism, communication, attitude, behaviors, and duties in the medical environment. Upon completion, students should be able to project a positive attitude and promote the profession of medical assisting.

**MED 118 Medical Law and Ethics (2-0-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers legal relationships of physicians and patients, contractual agreements, professional liability, malpractice, medical practice acts, informed consent, and bioethical issues. Emphasis is placed on legal terms, professional attitudes, and the principles and the basic concepts of ethics and laws involved in providing medical services. Upon completion, students should be able to meet the legal and ethical

responsibilities of a multi-skilled health professional. Guest speakers may be utilized to discuss current medicolegal topics and role-play sessions may be used to reenact various medical court cases.

**MED 120 Survey of Medical Terminology (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the vocabulary, abbreviations, and symbols used in the language of medicine. Emphasis is placed on building medical terms using prefixes, suffixes, and word roots. Upon completion, students should be able to pronounce, spell, and define accepted medical terms.

**MED 121 Medical Terminology I (3-0-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces prefixes, suffixes, and word roots. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

**MED 122 Medical Terminology II (3-0-0-0-3)**

Prerequisites: MED 121

Corequisites: None

This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

**MED 130 Administrative Office Procedures I (1-2-0-0-2)**

Prerequisites: Enrollment in the Medical Assisting Program, OST 131, MED 121

Corequisites: None

This course provides an introduction to all medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment. Students will participate in office simulation projects, throughout the course, which are designed to reinforce applications skills.

**MED 131 Administrative Office Procedures II (1-2-0-0-2)**

Prerequisites: MED 130

Corequisites: None

This course is the second in a series and provides medical office procedures in both economic and management skills. Topics include physical plant maintenance, equipment and supplies, liability coverage, medical economics, and introductory insurance procedures. Upon completion, students



should be able to manage the economics of the medical office and supervise personnel. Students will participate in office simulation projects, throughout the course, which are designed to reinforce applications skills.

### **MED 134 Medical Transcription (2-2-0-0-3)**

Prerequisites: MED 121, OST 131

Corequisites: None

This course provides the basic knowledge, understanding, and skills required to complete medical reports, and transcribe medical dictation. Emphasis is placed on correct punctuation, capitalization, and spelling. Upon completion, students should be able to demonstrate competency in medical transcription. Additionally, students will demonstrate competency in transcribing generic and proprietary drug names as well as competency in computer application skills necessary for successful medical transcription.

### **MED 140 Exam Room Procedures I (3-4-0-0-5)**

Prerequisites: Enrollment in the Medical Assisting Program

Corequisites: None

This course provides instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with exams and treatment, patient education, preparation and administration of medications, EKG's, vital signs, and medical emergencies. Upon completion, students should be able to perform competency based course topics. Students will demonstrate math competencies in algebraic computations necessary to successfully calculate drug dosages and determine equivalent doses among the household, apothecary, and metric systems.

### **MED 150 Laboratory Procedures I (3-4-0-0-5)**

Prerequisites: Enrollment in the Medical Assisting Program

Corequisites: None

This course is designed to provide instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collection and processing specimens, performing selective tests, phlebotomy, screening and follow-up of test results, and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics. Students will demonstrate proficiency in the use of medical office laboratory equipment necessary to perform basic laboratory tests.

### **MED 230 Administrative Office Procedures III (1-2-0-0-2)**

Prerequisites: MED 131

Corequisites: None

This course provides advanced medical office administrative procedures. Emphasis is placed on management skills including personnel supervision, practice management, public relations, and insurance coding. Upon completion, students should be able to exhibit advanced managerial medical assisting skills. Additional studies will

be devoted to hands-on practice sessions in insurance coding and development of assigned sections of an office procedure manual.

### **MED 240 Exam Room Procedures II (3-4-0-0-5)**

Prerequisites: MED 140, BIO 169

Corequisites: None

This course is designed to expand and build upon skills presented in MED 140. Emphasis is placed on advanced exam room procedures. Upon completion, students should be able to demonstrate enhanced competency in selected exam room procedures. Additional studies will concentrate on basic principles of diet therapy.

### **MED 250 Laboratory Procedures II (3-4-0-0-5)**

Prerequisites: MED 150, BIO 169

Corequisites: None

This course is designed to expand and build on skills presented in MED 150. Emphasis is placed on increasing proficiency in laboratory skills used in the medical setting. Upon completion, students should be able to demonstrate enhanced competency in selected medical laboratory procedures. Additional studies will concentrate on first aid and cardiopulmonary resuscitation (CPR).

### **MED 260 Clinical Externship (0-0-15-0-5)**

Prerequisites: MED 118, MED 230, MED 240, MED 250, MED 272

Corequisites: MED 262, MED 264

This course provides the opportunity to apply clinical, laboratory, and administrative skills in a medical facility. Emphasis is placed on enhancing competency in clinical and administrative skills necessary for comprehensive patient care, and, strengthening professional and communication interactions. Upon completion, students should be able to function as an entry-level health care professional. *The clinical externship rotation will be condensed into an 8 week session, with medical facility staff supervising students assigned to their facility for 30 hours per week.*

### **MED 262 Clinical Perspectives (1-0-0-0-1)**

Prerequisites: Enrollment in the Medical Assisting Program

Corequisites: MED 260, MED 264

This course is designed to explore personal and occupational responsibilities of the practicing medical assistant. Emphasis is placed on problems encountered during externships and development of problem solving skills. Upon completion, students should be able to act in a courteous and diplomatic manner when solving problems in the medical facility. Students will continue the development of assigned sections of a medical office procedure manual.



**MED 264 Medical Assisting Overview (2-0-0-0-2)**

Prerequisites: Enrollment in the Medical Assisting Program

Corequisites: MED 260, MED 262

This course provides an overview of the complete medical assisting curriculum. Emphasis is placed on all facets of medical assisting pertinent to administrative, laboratory, and clinical procedures performed in the medical environment. Upon completion, students should be prepared for the national certification examination for medical assistants. Students will participate in practice test sessions throughout the course that will culminate in a mock certification examination at the end of the course.

**MED 270 Symptomatology (2-2-0-0-3)**

Prerequisites: Enrollment in the Medical Assisting Program or enrollment in the Medical Transcription Program.

Corequisites: None

This course covers the study of disease symptoms and the appropriate actions taken by medical assistants in a medical facility in relation to these symptoms. Emphasis is placed on interviewing skills and appropriate triage, preparing patients for procedures, and screening the test results. Upon completion, students should be able to recognize how certain symptoms relate to specific diseases, recognize emergency situations, and take appropriate actions. Students will participate in class projects designed to meet the competencies of the course.

**MED 272 Drug Therapy (3-0-0-0-3)**

Prerequisites: Enrollment in the Medical Assisting Program, MED 140, MED 270, or enrollment in the Medical Transcription Program.

Corequisites: None

This course focuses on major drug groups, including their side effects, interactions, methods of administration, and proper documentation. Emphasis is placed on the theory of drug administration. Upon completion, students should be able to identify, spell, recognize side effects of and document the most commonly used medications in the physician's office. Students will research the 50 most commonly prescribed drugs according to guidelines set forth in the course.

**MIT****MIT 120 Intro to Audio Concepts (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to gain a basic level of competence in the integration of digital and analog audio. Emphasis is placed on understanding integration of audio resources such as MIDI, WAV, Real-audio, and Redbook Resources. Upon completion, students should be able to demonstrate familiarity with basic audio integration techniques and applications for stand-alone personal computers, networks, and integrated room systems.

**MIT 215 Video Integration (2-4-0-4)**

Prerequisites: MIT 115

Corequisites: None

This course provides an opportunity to gain competence in the integration of digital and analog video resources. Emphasis is placed on configuration, troubleshooting, and management of analog/digital video resources. Upon completion, students should be able to demonstrate familiarity with video setup and configurations and be able to integrate video resources.

**MIT 220 Audio Integration (2-4-0-4)**

Prerequisites: MIT 120

Corequisites: None

This course provides an opportunity to gain a basic level of competence in integration of digital/analog audio resources. Emphasis is placed on configuration, troubleshooting, and management of analog/digital audio resources. Upon completion, students should be able to integrate audio resources into various multimedia systems to meet user requirements.

**MARKETING AND RETAILING****MKT 120 Principles of Marketing (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

**MKT 220 Advertising and Sales Promotion (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application.

**INDUSTRIAL SYSTEMS TECHNOLOGY****MNT 110 Intro to Maint Procedures (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.



**MNT 111 Maintenance Practices (1-3-0-2)**

Prerequisites: MNT 110

Corequisites: None

This course provides in-depth theory and practical applications relating to predictive and preventive maintenance programs. Emphasis is placed on equipment failure, maintenance management software, and techniques such as vibration and infrared analysis. Upon completion, students should be able to demonstrate an understanding of modern analytical and documentation methods.

**MNT 230 Pumps & Piping Systems (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course covers pump installation and maintenance and related valves and piping systems. Topics include various types of pump systems and their associated valves, piping requirements, and other related topics. Upon completion, students should be able to select and install pump and piping systems and demonstrate proper maintenance and troubleshooting procedures.

**THERAPEUTIC MASSAGE****MTH 110 Fundamentals of Massage (6-12-0-10)**

Corequisites: BIO 163, MED 120, PSY 110

This course introduces concepts basic to the role of the massage therapist. Emphasis is placed on beginning theory and techniques of bodywork as well as skill in therapeutic touch. Upon completion of the course the student should be able to apply basic practical massage therapy skills.

**MTH 120 Therapeutic Massage Applications (6-12-0-10)**

Prerequisites: MTH 110

Corequisites: BIO 155, ENG 111, PSY 118

This course provides an expanded knowledge and skill base for the massage therapist. Emphasis is placed on selected therapeutic approaches throughout the life span. Upon completion of this course the student should be able to perform entry level massage therapy techniques.

**MTH 125 Ethics of Massage (2-0-0-2)**

Prerequisites: MTH 110, MTH 120

Corequisites: None

This course is designed to explore issues related to the practice of massage therapy. Emphasis is placed on ethical, legal, professional, and political issues. Upon completion, students should be able to discuss issues relating to the practice of massage therapy, client/therapist relationships as well as ethical issues.

**MTH 210 Advanced Skills of Massage (4-12-0-8)**

Prerequisites: MTH 110, MTH 120, MTH 125

Corequisites: BIO 271, ENG 114 OR ENG 112

This course provides knowledge and skills in diverse body work modalities. Emphasis is placed on selected techniques such as

Neuromuscular Therapy, Sports Massage, Soft Tissue Release, Spa Approaches, Oriental Therapies, and energy techniques. Upon completion, students should be able to perform basic skills in techniques covered.

**MTH 220 Outcome-based Massage (4-10-0-7)**

Prerequisites: MTH 110, MTH 120, MTH 125, MTH 210

Corequisites: COE 111

This course provides knowledge and skills in more complex body works modalities. Emphasis is placed on developing advanced skills in outcome-based Massage. Upon completion, students should be able to perform basic skills in techniques covered.

**MUSIC****MUS 110 Music Appreciation (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*

**MUS 111 Fundamentals of Music (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course is an introductory course for students with little or no music background. Emphasis is placed on music notation, rhythmic patterns, scales, key signatures, intervals, and chords. Upon completion, students should be able to demonstrate an understanding of the rudiments of music. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**MUS 112 Introduction to Jazz (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*



# COURSE DESCRIPTIONS

## MUS 113 American Music (3-0-0-3)

Prerequisites: None

Corequisites: None

This course introduces various musical styles, influences, and composers of the United States from pre-Colonial times to the present. Emphasis is placed on the broad variety of music particular to American culture. Upon completion, students should be able to demonstrate skills in basic listening and understanding of American music. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

## MUS 115 Orchestral Music (3-0-0-3)

Prerequisites: None

Corequisites: None

This course covers representational orchestral and chamber works from the Baroque period to the present. Emphasis is placed on the characteristics of important orchestral forms and styles. Upon completion, students should be able to demonstrate skills in listening to and analyzing orchestral music. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## MUS 121 Music Theory I (3-2-0-4)

Prerequisites: None

Corequisites: None

This course provides an in-depth introduction to melody, rhythm, and harmony. Emphasis is placed on fundamental melodic, rhythmic, and harmonic analysis, introduction to part writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## MUS 122 Music Theory II (3-2-0-4)

Prerequisites: MUS 121

Corequisites: None

This course is a continuation of studies begun in MUS 121. Emphasis is placed on advanced melodic, rhythmic, and harmonic analysis and continued studies in part-writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## MUS 131 Chorus I (0-2-0-1)

Prerequisites: None

Corequisites: None

This course provides an opportunity to gain experience singing in a chorus. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to

demonstrate skills needed to participate in choral singing leading to performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## MUS 132 Chorus II (0-2-0-1)

Prerequisites: MUS 131

Corequisites: None

This course provides a continuation of studies begun in MUS 131. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## MUS 135 Jazz Ensemble I (0-2-0-1)

Prerequisites: None

Corequisites: None

This course provides an opportunity for those who play an appropriate instrument to gain experience playing in a jazz ensemble. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## MUS 136 Jazz Ensemble II (0-2-0-1)

Prerequisites: MUS 135

Corequisites: None

This course is a continuation of MUS 135. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## MUS 141 Ensemble I (0-2-0-1)

Prerequisites: None

Corequisites: None

This course provides an opportunity to perform in any combination of instrumental, vocal, or keyboard groups of two or more. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*



**MUS 142 Ensemble II (0-2-0-1)**

Prerequisites: MUS 141

Corequisites: None

This course is a continuation of MUS 141. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**MUS 151 Class Music I (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**MUS 152 Class Music II (0-2-0-1)**

Prerequisites: MUS 151

Corequisites: None

This course is a continuation of MUS 151. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**MUS 161 Applied Music I (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**MUS 170 Business of Music (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the basic elements of the music business. Topics include copyright law, musical arrangements and abridgements, recording and songwriting contracts, agents and managers, performing rights organizations, and the musician's union. Upon completion, students should be able to demonstrate an understanding

of the basic elements of the music business. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**MUS 175 Recording Techniques 1 (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the recording studio from an artistic and operational point of view. Emphasis is placed on audio consoles, microphones, multitrack recorders, and echo chambers. Upon completion, students should be able to demonstrate understanding of operation and function of recording equipment and its relationship to musician, sound engineer, and producer. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**MUS 210 History of Rock Music (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course is a survey of Rock music from the early 1950's to the present. Emphasis is placed on musical groups, soloists, and styles related to the evolution of this idiom and on related historical and social events. Upon completion, students should be able to identify specific styles and to explain the influence of selected performers within their respective eras. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**MUS 212 American Musical Theatre (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the origins and development of the musical from Show Boat to the present. Emphasis is placed on the investigation of the structure of the musical and its components through listening and analysis. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**MUS 213 Opera and Musical Theatre (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the origins and development of opera and musical theatre from the works of Claudio Monteverdi to the present. Emphasis is placed on how the structure and components of opera and musicals effect dramaturgy through listening examples and analysis. Upon completion, students should be able to demonstrate analytical and listening skills in understanding both opera and the musical. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/ fine arts.*



# COURSE DESCRIPTIONS

## **MUS 214 Electronic Music 1 (1-2-0-2)**

Prerequisites: MUS 111

Corequisites: None

This course provides an opportunity to study and explore various electronic instruments and devices. Emphasis is placed on fundamental MIDI applications and implementation, features and application of sequences, sound modules, and digital keyboards. Upon completion, students should be able to demonstrate proficiency by creation of appropriate musical projects using the equipment and techniques covered. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## **MUS 217 Elementary Conducting (1-2-0-2)**

Prerequisites: MUS 111

Corequisites: None

This course introduces the basic patterns and skills for conducting instrumental and vocal groups. Emphasis is placed on conducting beat patterns, expressive gestures, fermatas, accents, tempos, and rehearsal techniques. Upon completion, students should be able to demonstrate the above skills by conducting vocal and/or instrumental groups. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## **MUS 221 Music Theory III (3-2-0-4)**

Prerequisites: MUS 122

Corequisites: None

This course is a continuation of MUS 122. Emphasis is placed on altered and chromatic harmony, common practice era compositional techniques and forms, and continued studies in part writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## **MUS 222 Music Theory IV (3-2-0-4)**

Prerequisites: MUS 221

Corequisites: None

This course is a continuation of studies begun in MUS 221. Emphasis is placed on continued study of common practice era compositional techniques and forms, 20th century practices, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## **MUS 231 Chorus III (0-2-0-1)**

Prerequisites: MUS 132

Corequisites: None

This course is a continuation of MUS 132. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and

periods of choral literature. Upon completion, students should be able to demonstrate skill s needed to participate in choral singing leading to performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## **MUS 232 Chorus IV (0-2-0-1)**

Prerequisites: MUS 231

Corequisites: None

This course is a continuation of MUS 231. Emphasis is placed on vocal techniques and the study of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## **MUS 235 Jazz Ensemble III (0-2-0-1)**

Prerequisites: MUS 136

Corequisites: None

This course is a continuation of MUS 136. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## **MUS 236 Jazz Ensemble IV (0-2-0-1)**

Prerequisites: MUS 235

Corequisites: None

This course is a continuation of MUS 235. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## **MUS 251 Class Music III (0-2-0-1)**

Prerequisites: MUS 152

Corequisites: None

This course is a continuation of MUS 152. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## **MUS 252 Class Music IV (0-2-0-1)**

Prerequisites: MUS 251

Corequisites: None

This course is a continuation of MUS 251. Emphasis is placed on techniques and styles and



the exploration and study of appropriate literature. Upon completion, students should be able to, demonstrate proficiency in the studied skills and repertoire through performance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **MUS 253 Big Band (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course includes the Big Band instrumentation of five saxes, four trumpets, four trombones, and four-piece rhythm section (bass, piano, drums, and guitar). Emphasis is placed on learning the repertoire specifically written for Big Band instrumentation. Upon completion, students should be able to demonstrate skills needed to participate in performance of Big Band music. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **MUS 265 Piano Pedagogy (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course introduces the basic methods and materials of piano instruction. Emphasis is placed on basic teaching techniques and piano literature appropriate for various skill levels. Upon completion, students should be able to identify and utilize appropriate teaching methods and materials for various levels of piano instruction. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **MUS 271 Music History I (3-0-0-3)**

Prerequisites: MUS 122

Corequisites: None

This course is the first of a two-semester, in-depth study of music history. Emphasis is placed on the history and literature of music from Antiquity through the Baroque Period. Upon completion, students should be able to trace important musical developments and demonstrate an understanding of the composers' styles. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **MUS 272 Music History II (3-0-0-3)**

Prerequisites: MUS 271

Corequisites: None

This course is the second of a two-semester, in-depth study of music history. Emphasis is placed on the history and literature of music from the Classical Period to the present. Upon completion, students should be able to trace important musical developments and demonstrate an understanding of the composers' styles. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **MUS 280 Music for the El Classrm (3-0-0-3)**

Prerequisites: MUS 110

Corequisites: None

This course covers the skills necessary for teaching music in the elementary school. Emphasis is placed on integrating music activities which are suitable for all ages of elementary students, including theory, performance, and conducting, into classroom activities. Upon completion, students should be able to utilize a variety of music activities in the elementary school classroom. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

## **NURSING ASSISTANT**

### **NAS 101 Nursing Assistant I (3-4-3-6)**

Prerequisites: None

Corequisites: None

*Effective Fall, 2006, this course will increase to 6 credit hours with 3 lecture, four lab, and six clinical hours.* This course introduces basic nursing skills required to provide personal care for patients, residents, or clients in a health care setting. Topics include communications, safety, patients' rights, personal care, vital signs, elimination, nutrition, emergencies, rehabilitation, and mental health. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant I with the North Carolina Nurse Aide I Registry.

### **NAS 102 Nursing Assistant II (3-2-6-6)**

Prerequisites: NAS 101 or equivalent State approved course, and current CNA I listing on the North Carolina Registry. High school diploma or GED required.

Corequisites: None

This course provides training in selected advanced nursing assistant procedures. Emphasis is placed on sterile techniques, respiratory procedures, catheterizations, wound and trach care, irrigations, and ostomy care. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant II with the North Carolina Board of Nursing.

## **NETWORKING**

### **NET 110 Data Comm/Networking (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduce data communication and networking. Topics include telecommunication standards, protocols, equipment, network topologies, communication software, LANs, WANs, the Internet, and network operating systems. Upon completion, students should be able to demonstrate understanding of the fundamentals of telecommunication and networking.



# COURSE DESCRIPTIONS

## **NET 125 Routing and Switching I (1-4-0-3)**

Prerequisites: NET 110, CIS 173, CIS 174,  
and CIS 175

Corequisites: None

This course introduces the OSI model, network topologies, IP addressing, and subnet masks, simple routing techniques, and basic switching terminology. Topics include the basic functions of the seven layers of the OSI model, different classes of IP addressing and subnetting, router login scripts. Upon completion, students should be able to list the key internetworking functions of the OSI Networking Layer and how they are performed in a variety of router types.

## **NET 126 Routing and Switching II (1-4-0-3)**

Prerequisites: NET 125

Corequisites: None

This course introduces router configurations, router protocols, switching methods, and hub terminology. Topics include the basic flow control methods, router startup commands, manipulation of router configuration files, IP and data link addressing. Upon completion, students should be able to prepare the initial router configuration files, as well as enable, verify, and configure IP addresses.

## **NET 175 Wireless Technology (2-2-0-3)**

Prerequisites: NET 110, CIS 173, CIS 174,  
and CIS 175

Corequisites: None

This course introduces the student to wireless technology and interoperability with different communication protocols. Topics include Wireless Application Protocol (WAP), Wireless Mark-up language (WML), link manager, service discovery protocol, transport layer and frequency band. Upon completion, students should be able to discuss in written and oral form protocols and procedures required for different wireless applications.

## **NURSING**

### **NUR 101 Practical Nursing I (7-6-6-11)**

Prerequisites: Admission to Program

Corequisites: BIO 163, PSY 110, NUR 118

This course introduces concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, legal/ethical/professional issues, wellness/illness patterns, and basic nursing skills. Upon completion, students should be able to demonstrate beginning understanding of nursing process to promote/ maintain/restore optimum health for diverse clients throughout the life span.

### **NUR 102 Practical Nursing II (8-0-12-12)**

Prerequisites: NUR 101, NUR 118, PSY 110,  
and BIO 163

Corequisites: NUR 117, ENG 111

This course includes more advanced concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, delegation, cost effectiveness, legal/ethical/professional issues, and wellness/illness patterns. Upon completion, students

should be able to begin participating in the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span. This course will include the essentials of maternity nursing with emphasis on safe and effective care for mothers, infants, and families.

### **NUR 103 Practical Nursing III (6-0-12-10)**

Prerequisites: NUR 101, NUR 102, NUR 117,  
BIO 163, PSY 110, NUR 118,  
and ENG 111

Corequisites: None

This course focuses on use of nursing/related concepts by practical nurses as providers of care/ members of discipline in collaboration with health team members. Emphasis is placed on the nursing process, wellness/illness patterns, entry-level issues, accountability, advocacy, professional development, evolving technology, and changing health care delivery systems. Upon completion, students should be able to use the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span. *This is a diploma-level course.*

### **NUR 115 Fundamentals of Nursing (2-3-6-5)**

Prerequisites: None

Corequisites: BIO 168, ENG 111, PSY 150,  
NUR 133

This course introduces concepts basic to beginning nursing practice. Emphasis is placed on the application of the nursing process to provide and manage care as a member of the discipline of nursing. Upon completion, students should be able to demonstrate beginning competence in caring for individuals with common alterations of health. Students will demonstrate competency in computer and pharmacology calculations skills.

### **NUR 117 Pharmacology (1-3-0-2)**

Prerequisites: NUR 101, BIO 163, and PSY 110

Corequisites: NUR 102

This course introduces information concerning sources, effects, legalities, and the safe use of medications as therapeutic agents. Emphasis is placed on nursing responsibility, accountability, pharmacokinetics, routes of medication administration, contraindications and side effects regarding drug therapy. Upon completion, students should be able to compute dosages and administer medication safely.

### **NUR 118 Nutrition/Diet Therapy (2-0-0-2)**

Prerequisites: Admission to Program

Corequisites: NUR 101

This course covers the six nutrient categories and provides an overview of diet recommendations for promotion and maintenance of health. Topics include the food pyramid recommendations for individuals across the life span, energy balance, and special dietary modifications for common alterations in health. Upon completion, students should be able to assist in completing nutritional assessments, analyzing diets, and reinforcing dietary adaptations to meet individual health needs.



**NUR 125 Maternal-Child Nursing (5-3-6-8)**

Prerequisites: NUR 133, NUR 135, NUR 115

Corequisites: SOC 210, NUR 188,

This course introduces nursing concepts related to the delivery of nursing care for the expanding family. Emphasis is placed on utilizing the nursing process as a framework for managing/providing nursing care to individuals and families along the wellness-illness continuum. Upon completion, students should be able to utilize the nursing process to deliver nursing care to mothers, infants, children, and families. Students will demonstrate competency in computer and pharmacology calculations skills.

**NUR 133 Nursing Assessment (2-3-0-3)**

Prerequisites: None

Corequisites: NUR 115, BIO 168, ENG 111

This course provides theory and application experiences for performing nursing assessment of individuals across the life span. Emphasis is placed on interviewing, and physical assessment techniques and documentation of findings appropriate for nursing. Upon completion, students should be able to complete a health history and perform a noninvasive physical assessment. Students will demonstrate competency in computer skills.

**NUR 135 Adult Nursing I (5-3-9-9)**

Prerequisites: NUR 115, NUR 133

Corequisites: BIO 169, PSY 281

This course introduces concepts related to the nursing care of individuals experiencing acute and chronic alterations in health. Emphasis is placed on utilizing the nursing process as a framework for providing and managing nursing care to individuals along the wellness-illness continuum. Upon completion, students should be able to apply the nursing process to individuals experiencing acute and chronic alterations in health. Students will demonstrate competency in computer and pharmacology calculations skills.

**NUR 185 Mental Health Nursing (3-0-6-5)**

Prerequisites: NUR 115, NUR 133, NUR 135,

Corequisites: BIO 275, ENG 112, NUR 188

This course includes concepts related to the nursing care of individuals experiencing alterations in social and psychological functioning. Emphasis is placed on utilizing the nursing process to provide and manage nursing care for individuals with common psychiatric disorders or mental health needs. Upon completion, students should be able to apply psychosocial theories in the nursing care of individuals with psychiatric/mental health needs. Students will demonstrate competency in computer and pharmacology calculations skills.

**NUR 187 Transitions Practicum (0-0-6-2)**

Prerequisites: ENG 111, PSY 150, PSY 241, BIO 168, BIO 169

Corequisites: BIO 275, ENG 112, NUR 189

This course provides a clinical practice component designed to assist the licensed practical nurse to transition to the role of the associate degree nurse. Emphasis is placed on developing

the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon completion, the students should be able to demonstrate competency in the delivery of nursing care for individuals with common alterations in health. Students will demonstrate competency in computer and pharmacology calculation skills.

**NUR 188 Nursing in the Community (1-0-6-3)**

Prerequisites: NUR 115, NUR 133, NUR 135

Corequisites: NUR 185, ENG 112, BIO 275

This course introduces concepts and practices of community-based nursing care across the life span. Topics include home care history, agency regulation/standards, nurse's roles, the interdisciplinary team, and the application of nursing care to the community setting. Upon completion, students should be able to provide nursing care, manage nursing care, and function as a member of the discipline in home health care. Students will demonstrate competency in computer and pharmacology calculations skills.

**NUR 189 Nursing Transitions (1-3-0-2)**

Prerequisites: ENG 111, PSY 150, PSY 241, BIO 168, BIO 169

Corequisites: BIO 275, ENG 112, NUR 187

This course is designed to assist the licensed practical nurse in transition to the role of the associate degree nurse. Topics include the role of the registered nurse, nursing process, homeostasis, and validation of selected nursing skills and physical assessment. Upon completion, students should be able to articulate into the ADN program at the level of the generic student. Students will demonstrate competency in computer and pharmacology calculations skills.

**NUR 222 LPN to AD Nursing I (6-0-6-8)**

Prerequisites: ENG 111, PSY 150, PSY 241, BIO 168, BIO 169, BIO 275, ENG 112, NUR 187, NUR 189

Corequisites: SOC 210

This course is designed to assist the licensed practical nurse in transition to the independent role of the associate degree nurse. Emphasis is placed on developing the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to utilize the nursing process to deliver nursing care for a diverse group of individuals with alterations in health. Students will demonstrate competency in computer and pharmacology calculations skills.

**NUR 224 LPN to AD Nursing II (6-0-6-8)**

Prerequisites: ENG 111, PSY 150, PSY 241, BIO 168, BIO 169, BIO 275, ENG 112, NUR 187, NUR 189, NUR 222

Corequisites: HUM, NUR 233

This course is designed to increase the licensed practical nurse's knowledge and application of advanced medical/surgical concepts. Emphasis is placed on developing the nurse's role as provider of care, manager of care and member of discipline of nursing. Upon completion, students should be able to utilize the nursing process to



deliver care for a diverse group of individuals with complex alterations in health. Students will demonstrate competency in computer and pharmacology calculations skills.

### **NUR 233 Leadership in Nursing (2-0-0-2)**

Prerequisites: ENG 111, PSY 150, PSY 241, BIO 168, BIO 169, BIO 275, ENG 112, NUR 187, NUR 189, NUR 222

Corequisites: HUM, NUR 224

This course is designed to enhance nursing leadership and management skills in a variety of health care settings. Emphasis is placed on leadership styles, supervision, delegation, leadership and management theories, conflict resolution, change, and time management. Upon completion, students should be able to apply leadership and management skills in a variety of health care settings. Students will demonstrate competency in computer skills

### **NUR 235 Adult Nursing II (4-3-15-10)**

Prerequisites: NUR 115, NUR 125, NUR 133, NUR 135, NUR 185, NUR 188

Corequisites: NUR 255

This course provides expanded concepts related to nursing care for individuals experiencing common complex alterations in health. Emphasis is placed on the nurse's role as a member of a multidisciplinary team and as a manager of care for a group of individuals. Upon completion, students should be able to provide comprehensive nursing care for groups of individuals with common complex alterations in health. Students will demonstrate competency in computer and pharmacology calculations skills.

### **NUR 255 Professional Issues (3-0-0-3)**

Prerequisites: NUR 115, NUR 125, NUR 133, NUR 135, NUR 188, NUR 185

Corequisites: NUR 235

This course explores basic concepts of practice in the management of patient care in a complex health care system. Emphasis is placed on professional, legal, ethical, and political issues and management concepts. Upon completion, students should be able to articulate professional and management concepts. Students will demonstrate competency in computer and pharmacology calculations skills.

## **OFFICE SYSTEMS TECHNOLOGY**

### **OST 080 Keyboarding Literacy (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course is designed to develop elementary keyboarding skills. Emphasis is placed on the mastery of the keyboard. Upon completion, students should be able to demonstrate basic proficiency in keyboarding and be keying at a minimum speed of 25 WAM.

### **OST 122 Office Computations (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the keypad and the touch method using the electronic calculator. Topics include mathematical functions in business applications. Upon completion, students should be able to use the electronic calculator to solve a wide variety of problems commonly encountered in business. Students will also gain exposure in using the 10-key pad on the computer keyboard.

### **OST 131 Keyboarding (1-2-0-2)**

Prerequisites: Proficiency exam with keying speed of 25 WAM

Corequisites: None

This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system and be keying at a minimum speed of 38 WAM.

### **OST 132 Keyboard Skill Building (1-2-0-2)**

Prerequisites: OST 131

Corequisites: None

This course provides accuracy- and speed-building drills. Emphasis is placed on diagnostic tests to identify accuracy and speed deficiencies followed by corrective drills. Upon completion, students should be able to keyboard rhythmically with greater accuracy and speed and be keying at a minimum speed of 42-45 WAM.

### **OST 134 Text Entry & Formatting (2-2-0-3)**

Prerequisites: OST 131

Corequisites: None

This course is designed to provide the skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce mailable documents and be keying at a minimum speed of 48-55 WAM. Students must demonstrate a proficiency in the touch system of keyboarding prior to taking this course or take OST 131 Keyboarding.

### **OST 135 Adv Text Entry & Formatting (3-2-0-4)**

Prerequisites: OST 132 and OST 134

Corequisites: None

This course is designed to incorporate computer application skills in the generation of office documents. Emphasis is placed on the production of letters, manuscripts, business forms, tabulation, legal documents, and newsletters. Upon completion, students should be able to make independent decisions regarding planning, style, and method of presentation.

### **OST 136 Word Processing (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course introduces word processing concepts and applications. Topics include preparation of a



variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment.

**OST 137 Office Software Applications (1-2-0-2)**

Prerequisites: OST 131

Corequisites: None

This course introduces the concepts and functions of software that meet the changing needs of the community. Emphasis is placed on the terminology and use of software through a hands on approach. Upon completion, students should be able to use software in a business environment.

**OST 141 Medical Terms I Med Office (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course uses a language-structure approach to present the terminology and vocabulary that will be encountered in medical office settings. Topics include word parts that relate to systemic components, conditions, pathology, and disorder remediation in approximately one-half of the systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

**OST 142 Medical Terms II Med Office (3-0-0-3)**

Prerequisites: OST 141

Corequisites: None

This course is a continuation of OST 141 and continues the study, using a language-structure approach, of medical office terminology and vocabulary. Topics include word parts that relate to systemic components, conditions, pathology, and disorder remediation in the remaining systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

**OST 148 Medical Coding Billing & Insurance (3-0-0-3)**

Prerequisites: OST 141

Corequisites: None

This course introduces CPT and ICD coding as they apply to medical insurance and billing. Emphasis is placed on accuracy in coding, forms preparation, and posting. Upon completion, students should be able to describe the steps of the total billing cycle and explain the importance of accuracy.

**OST 149 Medical Legal Issues (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice

liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior.

**OST 155 Legal Terminology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the terminology appropriate to the legal profession. Topics include legal research, court systems, litigation, civil and criminal law, probate, real and personal property, contracts and leases, domestic relations, equity, and corporations. Upon completion, students should be able to spell, pronounce, define, and demonstrate an understanding of the use of these legal terms.

**OST 156 Legal Office Procedures (2-2-0-3)**

Prerequisites: OST 134

Corequisites: None

This course covers legal office functions involved in the operation of a law office. Emphasis is placed on procedures in the law office involving the court system, legal research, litigation, probate, and real estate, personal injury, criminal, and civil law. Upon completion, students should be able to demonstrate a high level of competence in performing legal office duties.

**OST 162 Executive Terminology (3-0-0-3)**

Prerequisites: ENG 111, OST 164

Corequisites: ENG 114

This course is designed to increase and improve proficiency in word usage. Topics include root words, prefixes, suffixes, homonyms, synonyms, and specialized vocabularies. Upon completion, students should be able to use acquired vocabulary skills in the global workplace. Emphasis is placed on written business reports, correspondence, and professional presentations.

**OST 164 Text Editing Applications (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

**OST 184 Records Management (1-2-0-2)**

Prerequisites: CIS 110

Corequisites: None

This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to set up and maintain a records management system. A computerized software program will be utilized in the storage of data.



**OST 201 Medical Transcription I (3-2-0-4)**

Prerequisites: BIO 163, OST 131, OST 136,  
OST 141 or MED 121,  
and OST 164

Corequisites: OST 203, MED 122 or OST 142

This course introduces dictating equipment and typical medical dictation. Emphasis is placed on efficient use of equipment, dictionaries, PDRs, and other reference materials. Upon completion, students should be able to efficiently operate dictating equipment and to accurately transcribe a variety of medical documents in a specified time. This course is intended for diploma programs.

**OST 202 Medical Transcription II (3-2-0-4)**

Prerequisites: OST 201

Corequisites: None

This course provides additional practice in transcribing documents from various medical specialties. Emphasis is placed on increasing transcription speed and accuracy and understanding medical procedures and terminology. Upon completion, students should be able to accurately transcribe a variety of medical documents in a specified time. This course is intended for diploma programs.

**OST 203 Fund of Med Doc (3-0-0-3)**

Prerequisites: RED 090

Corequisites: MED 121 or OST 141

This course covers the information and procedures necessary for producing acceptable medical documentation. Topics include digital dictation systems; workplace security systems; the access, retrieval, and transport of medical documents and other transcribing techniques necessary for acceptable medical documentation. Upon completion, students should be able to process medical documents in a home-based or medical facility.

**OST 223 Machine Transcription I (1-2-0-2)**

Prerequisites: ) OST 134, OST 136, OST 164

Corequisites: None

This course covers the use of transcribing machines to produce mailable documents. Emphasis is placed on appropriate formatting, advanced text editing skills, and transcription techniques. Upon completion, students should be able to transcribe documents into mailable copy.

**OST 233 Office Publications Design (2-2-0-3)**

Prerequisites: OST 136

Corequisites: None

This course provides entry-level skills in using software with desktop publishing capabilities. Topics include principles of page layout, desktop publishing terminology and applications, and legal and ethical considerations of software use. Upon completion, students should be able to design and produce professional business documents and publications.

**OST 236 Adv Word/Information Processing (2-2-0-3)**

Prerequisites: OST 136

Corequisites: None

This course develops proficiency in the utilization of advanced word/information processing

functions. Topics include tables, graphics, macros, sorting, document assembly, merging, and newspaper and brochure columns. Upon completion, students should be able to produce a variety of complex business documents.

**OST 241 Med Ofc Transcription I (1-2-0-2)**

Prerequisites: OST 131, OST 136, OST 142

Corequisites:

This course introduces machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription, proofreading, and use of reference materials as well as vocabulary building. Upon completion, students should be able to prepare accurate and usable transcripts of voice recordings in the covered specialties.

**OST 243 Med Office Simulation (2-2-0-3)**

Prerequisites: OST 142, OST 148

Corequisites: None

This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, storing and retrieving information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections.

**OST 252 Legal Transcription I (2-2-0-3)**

Prerequisites: OST 155 and OST 134  
or OST 136

Corequisites: None

This course provides experience in using the transcriber to produce legal correspondence, forms, and documents with mailable accuracy from recorded tapes. Emphasis is placed on operating the transcriber, developing listening skills to translate the audio into hard copy, and producing mailable documents. Upon completion, students should be able to transcribe legal forms and documents with reasonable accuracy. *This course is a unique concentration requirement in the Legal Office Systems concentration in the Office Systems Technology program.*

**OST 284 Emerging Technologies (1-2-0-2)**

Prerequisites: None

Corequisites: OST 236

This course provides opportunities to explore emerging technologies. Emphasis is placed on identifying, researching, and presenting current technological topics for class consideration and discussion. Upon completion, students should be able to understand the importance of keeping abreast of technological changes that affect the office professional.

**OST 286 Professional Development (3-0-0-3)**

Prerequisites: OST 131, OST 136

Corequisites: None

This course covers the personal competencies and qualities needed to project a professional image in the office. Topics include interpersonal skills, health lifestyles, appearance, attitude, personal and professional growth, multi-cultural awareness, and professional etiquette. Upon



completion, students should be able to demonstrate these attributes in the classroom, office, and society.

### **OST 289 Office Systems Management (2-2-0-3)**

Prerequisites: OST 134 or OST 136, OST 164  
Corequisites: None

This course provides a capstone course for the office professional. Topics include administrative office procedures, imaging, communication techniques, ergonomics, and equipment utilization. Upon completion, students should be able to function proficiently in a changing office environment.

### **PARALEGAL - See Legal Education (LEX)**

## **PHLEBOTOMY**

### **PBT 100 Phlebotomy Technology (5-2-0-6)**

Prerequisite: Enrollment in the Phlebotomy Certificate Program

Corequisites: PBT 101

This course provides instruction in the skills needed for the proper collection of blood and other specimens used for diagnostic testing. Emphasis is placed on ethics, legalities, medical terminology, safety and universal precautions, health care delivery systems, patient relations, anatomy and physiology, and specimen collection. Upon completion, students should be able to demonstrate competence in the theoretical comprehension of phlebotomy techniques. *This is a certificate-level course.*

### **PBT 101 Phlebotomy Practicum (0-0-9-3)**

Prerequisite: Enrollment in the Phlebotomy Certificate Program

Corequisites: PBT 100

This course provides supervised experience in the performance of venipuncture and microcollection techniques in a clinical facility. Emphasis is placed on patient interaction and application of universal precautions, proper collection techniques, special procedures, specimen handling, and data management. Upon completion, students should be able to safely perform procedures necessary for specimen collections on patients in various healthcare settings. *This is a certificate-level course.*

## **PHYSICAL EDUCATION**

### **PED 110 Fit and Well for Life (1-2-0-2)**

Prerequisites: None  
Corequisites: None

This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

### **PED 111 Physical Fitness I (0-3-0-1)**

Prerequisites: None  
Corequisites: None

This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. Upon completion, students should be able to set up and implement an individualized physical fitness program. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

### **PED 112 Physical Fitness II (0-3-0-1)**

Prerequisites: PED III or instructor permission  
Corequisites: None

This course is an intermediate-level fitness class. Topics include specific exercises contributing to fitness and the role exercise plays in developing body systems. Upon completion, students should be able to implement and evaluate an individualized physical fitness program. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

### **PED 113 Aerobics I (0-3-0-1)**

Prerequisites: None  
Corequisites: None

This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

### **PED 114 Aerobics II (0-3-0-1)**

Prerequisites: PED 113  
or instructor permission

Corequisites: None

This course provides a continuation of a program of cardiovascular fitness involving rhythmic exercise. Emphasis is placed on a wide variety of aerobic activities which include cardiovascular efficiency, strength, and flexibility. Upon completion, students should be able to participate in and design a rhythmic aerobic exercise routine. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

### **PED 117 Weight Training I (0-3-0-1)**

Prerequisites: None  
Corequisites: None

This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*



**PED 118 Weight Training II (0-3-0-1)**

Prerequisites: PED 117

Corequisites: None

This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight training program. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 119 Circuit Training (0-3-0-1)**

Prerequisites: None

Corequisites: None

This course covers the skills necessary to participate in a developmental fitness program. Emphasis is placed on the circuit training method which involves a series of conditioning timed stations arranged for maximum benefit and variety. Upon completion, students should be able to understand and appreciate the role of circuit training as a means to develop fitness. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 122 Yoga I (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course introduces the basic discipline of yoga. Topics include proper breathing, relaxation techniques, and correct body positions. Upon completion, students should be able to demonstrate the procedure of yoga. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 123 Yoga II (0-2-0-1)**

Prerequisites: PED 122

or instructor permission

Corequisites: None

This course introduces more detailed aspects of the discipline of yoga. Topics include breathing and physical postures, relaxation, and mental concentration. Upon completion, students should be able to demonstrate advanced procedures of yoga. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 128 Golf-Beginning (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 129 Golf-Intermediate (0-2-0-1)**

Prerequisites: PED 128 or instructor permission

Corequisites: None

This course covers the more advanced phases of golf. Emphasis is placed on refining the fundamental skills and learning more advanced phases of the games such as club selection, trouble shots, and course management. Upon completion, students should be able demonstrate the knowledge and ability to play a recreational round of golf. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 130 Tennis-Beginning (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 131 Tennis-Intermediate (0-2-0-1)**

Prerequisites: PED 130 or instructor permission

Corequisites: None

This course emphasizes the refinement of playing skills. Topics include continuing the development of fundamentals, learning advanced serves, and strokes and pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 138 Archery (0-2-0-1)**

Prerequisites: None

Corequisites: None This course introduces basic archery safety and skills. Topics include proper techniques of stance, bracing, drawing, and releasing as well as terminology and scoring. Upon completion, students should be able to participate safely in target archery. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 139 Bowling-Beginning (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course introduces the fundamentals of bowling. Emphasis is placed on ball selection, grips, stance, and delivery along with rules and etiquette. Upon completion, students should be able to participate in recreational bowling. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 140 Bowling-Intermediate (0-2-0-1)**

Prerequisites: PED 139 or instructor

Corequisites: None

This course covers more advanced bowling techniques. Emphasis is placed on refining basic skills and performing advanced shots, spins, pace, and strategy. Upon completion, students should be able to participate in competitive bowling. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*



**PED 142 Lifetime Sports (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course is designed to give an overview of a variety of sports activities. Emphasis is placed on the skills and rules necessary to participate in a variety of lifetime sports. Upon completion, students should be able to demonstrate an awareness of the importance of participating in lifetime sports activities. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 143 Volleyball-Beginning (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course covers the fundamentals of volleyball. Emphasis is placed on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 144 Volleyball-Intermediate (0-2-0-1)**

Prerequisites: PED 143 or instructor permission

Corequisites: None

This course covers more advanced volleyball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to participate in competitive volleyball. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 145 Basketball-Beginning (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course covers the fundamentals of basketball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational basketball. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 172 Outdoor Living (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course is designed to acquaint the beginning camper with outdoor skills. Topics include camping techniques such as cooking and preserving food, safety, and setting up camp. Upon completion, students should be able to set up camp sites in field experiences using proper procedures. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 181 Snow Skiing-Beginning (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course introduces the fundamentals of snow skiing. Topics include basic techniques, safety, and equipment involved in snow skiing. Upon completion, students should be able to ski a down

slope, enter and exit a ski lift, and perform basic maneuvers on skis. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PED 182 Snow Skiing Intermediate (0-2-0-1)**

Prerequisites: PED 181 or instructor permission

Corequisites: None

This course is designed to further develop snow skiing skills. Topics include selection and care of equipment, parallel skiing and turns, chfisties, advanced jumps, trail skiing, and slalom racing. Upon completion, students should be able to ski on varying terrains and snow conditions with control and safety. *This course has been approved for transfer through the Comprehensive Articulation Agreement.*

**PHILOSOPHY****PHI 210 History of Philosophy (3-0-0-3)**

Prerequisites: ENG 111, RED 090

Corequisites: None

This course introduces fundamental philosophical issues through an historical perspective. Emphasis is placed on such figures as Plato, Aristotle, Lao Tzu, Confucius, Augustine, Aquinas, Descartes, Locke, Kant, Wollstonecraft, Nietzsche, and Sartre. Upon completion, students should be able to identify and distinguish among the key positions of the philosophers studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**PHI 215 Philosophical Issues (3-0-0-3)**

Prerequisites: ENG 111, RED 090

Corequisites: None

This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critique the philosophical components of an issue. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/ fine arts.*

**PHI 220 Western Philosophy 1 (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: None

This course covers Western intellectual and philosophic thought from the early Greeks through the medievalists. Emphasis is placed on such figures as the pre-Socratics, Plato, Aristotle, Epicurus, Epictetus, Augustine, Suarez, Anselm, and Aquinas. Upon completion, students should be able to trace the development of leading ideas regarding reality, knowledge, reason, and faith. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*



**PHI 221 Western Philosophy II (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: None

This course covers Western intellectual and philosophic thought from post-medievalists through recent thinkers. Emphasis is placed on such figures as Descartes, Spinoza, Leibnitz, Locke, Berkeley, Hume, Kant, Hegel, Marx, Mill, and representatives of pragmatism, logical positivism, and existentialism. Upon completion, students should be able to trace the development of leading ideas concerning knowledge, reality, science, society, and the limits of reason. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**PHI 230 Introduction to Logic (3-0-0-3)**

Prerequisites: ENG 111, RED 090

Corequisites: None

This course introduces basic concepts and techniques for distinguishing between good and bad reasoning. Emphasis is placed on deduction, induction, validity, soundness, syllogisms, truth functions, predicate logic, analogical inference, common fallacies, and scientific methods. Upon completion, students should be able to analyze arguments, distinguish between deductive and inductive arguments, test validity, and appraise inductive reasoning. *This course has been approved to satisfy the Comprehensive Articulation general education core requirement in humanities/fine arts.*

**PHI 240 Introduction to Ethics (3-0-0-3)**

Prerequisites: ENG 111, RED 090

Corequisites: None

This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*

**PHI 250 Philosophy of Science (3-0-0-3)**

Prerequisites: ENG 111, MAT 161

Corequisites: None

This course introduces the concepts of empirical observations and laws and their role in scientific explanation, prediction, and theory formation. Topics include the relationship between the philosophy of science and inductive/deductive logic, analytic philosophy, logical empiricism, and explanatory paradigms. Upon completion, students should be able to describe the development and role of scientific explanation, prediction, theory formation, and explanatory paradigms in the natural and social sciences. *This course has been*

*approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**PHYSICAL SCIENCE****PHS 110 Survey of Phys Science (3-2-0-4)**

Prerequisites: MAT 070 and RED 090

Corequisites: None

This course introduces the physical environment with emphasis on the laws and physical concepts that impact the world and universe. Topics include astronomy, geology, meteorology, general chemistry, and general physics. Upon completion, students should be able to describe the forces and composition of the earth and universe. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**PHS 130 Earth Science (3-2-0-4)**

Prerequisites: MAT 070 AND RED 090

Corequisites: None

This course is a survey of the forces that impact the earth. Topics include geology, oceanography, and meteorology. Upon completion, students should be able to explain and identify the forces within, on, and around the earth as they influence the earth's dynamics. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**PHS 140 Weather and Climate (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the nature, origin, processes, and dynamics of the earth's atmospheric environment. Topics include general weather, patterns, climate, and ecological influences on the atmosphere. Upon completion, students should be able to demonstrate an understanding of weather, formation, precipitation, storm patterns, and processes of atmospheric pollution. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**PHYSICS****PHY 110 Conceptual Physics (3-0-0-3)**

Prerequisites: RED 090 and MAT 070

Corequisites: None

This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*



**PHY 110A Conceptual Physics Lab (0-2-0-1)**

Prerequisites: None

Corequisites: PHY 110

This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**PHY 121 Applied Physics I (3-2-0-4)**

Prerequisites: None

Corequisites: None

This algebra-based course introduces fundamental physical concepts as applied to industrial and service technology fields. Topics include systems of units, problem-solving methods, graphical analyzes, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied in industrial and service fields.

**PHY 122 Applied Physics II (3-2-0-4)**

Prerequisites: None

Corequisites: None

This algebra-based course introduces fundamental physical concepts as applied to industrial and service technology fields. Emphasis is placed on systems of units, problem-solving methods, graphical analysis, static electricity, AC and DC circuits, magnetism, transformers, AC and DC motors, and generators. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied in industrial and service fields.

**PHY 131 Physics-Mechanics (3-2-0-4)**

Prerequisites: to MAT 121, MAT 161, MAT 171, or MAT 175

Corequisites: None

This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

**PHY 132 Physics-Elec & Magnetism (3-2-0-4)**

Prerequisites: PHY 131

Corequisites: None

This algebra/trigonometry-based course is a study of fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, waves, electricity, magnetism, circuits, transformers, motors, and generators. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

**PHY 133 Physics-Sound & Light (3-2-0-4)**

Prerequisites: PHY 131

Corequisites: None

This algebra/trigonometry-based course is a study of fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, wave motion, sound, light, and modern physics. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

**PHY 140 Physics-Mech Structures (3-2-0-4)**

Prerequisites: PHY 131

Corequisites: None

This algebra/trigonometry-based course introduces the analysis of mechanical structures. Topics include equilibrium of two- and three-dimensional forces, centroids, center of gravity, and the analysis of trusses and frames. Upon completion, students should be able to analyze typical structural systems and calculate internal and external forces on structural members.

**PHY 141 Fiber Optics (3-2-0-4)**

Prerequisites: PHY 131

Corequisites: None

This course provides a fundamental understanding of physical principles related to fiber optic systems. Topics include the nature of light, optical fibers, detectors, modulation formats, system design, physical optics, and optical communication. Upon completion, students should be able to demonstrate an understanding of the fundamental principles studied as they relate to practical applications of fiber optic systems.

**PHY 151 College Physics I (3-2-0-4)**

Prerequisites: MAT 161 or MAT 171

Corequisites: None

This course uses algebra-and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**PHY 152 College Physics II (3-2-0-4)**

Prerequisites: PHY 151

Corequisites: None

This course uses algebra-and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles



involved and display analytical problem-solving ability for the topics covered. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**PHY 153 Modern Topics in Physics (3-2-0-4)**

Prerequisites: PHY 151

Corequisites: None

This course uses algebra-and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include atomic structure, nuclear processes, natural and artificial radioactivity, basic quantum theory, and special relativity. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

**PHY 251 General Physics I (3-3-0-4)**

Prerequisites: MAT 271

Corequisites: MAT 272

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**PHY 252 General Physics II (3-3-0-4)**

Prerequisites: MAT 272 and PHY 251

Corequisites: None

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**PHY 253 Modern Physics (3-3-0-4)**

Prerequisites: PHY 251

Corequisites: None

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include atomic structure, nuclear processes, natural and artificial radioactivity, quantum theory, and special relativity. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

## PLASTICS

**PLA 120 Injection Molding (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course provides theory and processing experience with the injection molding process. Topics include machine type, molds, controls, machine-polymer part relationship, molding factors, troubleshooting, and molding problems/solutions. Upon completion, students should be able to demonstrate an understanding of machine setup and operation and be able to optimize common injection molding machines. Additional topics include introduction to polymer chemistry, sources of plastics, forms of plastics, thermoplastics, and thermosetting materials; oral and written communications skills will be emphasized.

**PLA 162 Plastics Manuf Processes (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers manufacturing processes including machining, sawing, routing, milling, drilling, tapping, turning, thermoforming, molding, extrusion, laminating, reinforcing, expansion, casting, coasting, assembly, and finishing. Emphasis is placed on the process and equipment requirements, special operational concerns, setup, operation, tooling, capability limitations, maintenance, and safety. Upon completion, students should be able to select the correct process for the material required and discuss machine operation, setup, tooling, safety, and scrap recycling. Oral and written communications skills will be emphasized.

**PLA 230 Adv Plastics Manufacturing (3-3-0-4)**

Prerequisites: PLA 120 and PLA 162

Corequisites: None

This course covers advanced plastics manufacturing processes. Topics include hands-on experience, -material selection, manufacturing cost, process optimization, troubleshooting, and project management. Upon completion, students should be able to understand, perform, and troubleshoot advanced processes in a manufacturing environment. Oral and written communications skills will be emphasized.

## POLITICAL SCIENCE

**POL 110 Intro Political Science (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces basic political concepts used by governments and addresses a wide range of political issues. Topics include political theory, ideologies, legitimacy, and sovereignty in democratic and non-democratic systems. Upon completion, students should be able to discuss a variety of issues inherent in all political systems and draw logical conclusions in evaluating these systems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*



**POL 120 American Government (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

**POL 130 State & Local Government (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course includes state and local political institutions and practices in the context of American federalism. Emphasis is placed on procedural and policy differences as well as political issues in state, regional, and local governments of North Carolina. Upon completion, students should be able to identify and discuss various problems associated with intergovernmental politics and their effect on the community and the individual. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**POL 210 Comparative Government (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course provides a cross-national perspective on the government and politics of contemporary nations such as Great Britain, France, Germany, and Russia. Topics include each country's historical uniqueness, key institutions, attitudes and ideologies, patterns of interaction, and current political problems. Upon completion, students should be able to identify and compare various nations' governmental structures, processes, ideologies, and capacity to resolve major problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.*

**POL 220 International Relations (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course provides a study of the effects of ideologies, trade, armaments, and alliances on relations among nation-states. Emphasis is placed on regional and global cooperation and conflict, economic development, trade, non-governmental organizations, and international institutions such as the World Court and UN. Upon completion, students should be able to identify and discuss major international relationships, institutions, and problems. *This course has been approved to satisfy the Comprehensive Articulation*

*Agreement general education core requirement in social behavioral sciences.*

**PRE-ENGINEERING - See EGR****PSYCHOLOGY****PSY 101 Applied Psychology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the basic principles of psychology as they apply to daily life. Topics include perception, emotions, motivation, adjustment, behavior management, communication, and related topics that promote growth and development on the job and in one's personal life. Upon completion, students should be able to apply the principles learned in this class to everyday living. *This course is intended for diploma programs.*

**PSY 102 Human Relations (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers the skills necessary to handle human relationships effectively. Topics include self-understanding, interpersonal communication, group dynamics, leadership skills, diversity, time and stress management, and conflict resolution with emphasis on work relationships. Upon completion, students should be able to demonstrate improved personal and interpersonal effectiveness. *This course is intended for diploma programs*

**PSY 110 Life Span Development (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course provides an introduction to the study of human growth and development. Emphasis is placed on the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span and apply this knowledge to their specific field of study.

**PSY 118 Interpersonal Psychology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the basic principles of psychology as they relate to personal and professional development. Emphasis is placed on personality traits, communication/leadership styles, effective problem solving, and cultural diversity as they apply to personal and work environments. Upon completion, students should be able to demonstrate an understanding of these principles of psychology as they apply to personal and professional development.

**PSY 135 Group Processes (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an examination of group dynamics and structure. Topics include team building, interpersonal communication, leadership, decision making, and problem solving.



Upon completion, students should be able to demonstrate the knowledge and skills necessary for effective group participation.

### **PSY 150 General Psychology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

### **PSY 183 Psychology of Addiction (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers historical and theoretical perspectives on addictive behavior and the genetic, familial, and sociocultural influences on addiction. Topics include addictions to eating, gambling, alcohol, drugs, relationships, work, and sex. Upon completion, students should be able to demonstrate a knowledge of the theories of addiction and the factors underlying addictive behaviors.

### **PSY 211 Psychology of Adjustment (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course introduces the study of the adjustment process focusing on contemporary challenges individuals must deal with in everyday life. Topics include theories of behavior, career choices, self-understanding, coping mechanisms, human relationships, intimacy, sociocultural factors influencing healthy personal adjustment, and other related topics. Upon completion, students should be able to demonstrate an awareness of the processes of adjustment. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **PSY 237 Social Psychology (3-0-0-3)**

Prerequisites: PSY 150 or SOC 210

Corequisites: None

This course introduces the study of individual behavior within social contexts. Topics include affiliation, attitude formation and change, conformity, altruism, aggression, attribution, interpersonal attraction, and group behavior. Upon completion, students should be able to demonstrate an understanding of the basic principles of social influences on behavior. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

### **PSY 239 Psychology of Personality (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course covers major personality theories and personality research methods. Topics include psychoanalytic, behavioristic, social learning, cognitive, humanistic, and trait theories including supporting research. Upon completion, students should be able to compare and contrast traditional and contemporary approaches to the understanding of individual differences in human behavior. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

### **PSY 241 Developmental Psych (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

### **PSY 243 Child Psychology (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course provides an overview of physical, cognitive, and psychosocial development from conception through adolescence. Topics include theories and research, interaction of biological and environmental factors, language development, learning and cognitive processes, social relations, and moral development. Upon completion, students should be able to identify typical and atypical childhood behavior patterns as well as appropriate strategies for interacting with children. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### **PSY 244 Child Development I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an introduction to the study of child development and examines the growth and development of children from conception through early childhood. Topics include historical and theoretical perspectives, terminology, research and observation techniques as well as physical, cognitive, and psychosocial growth and change. Upon completion, students should be able to demonstrate an understanding of the early stages of child development.



**PSY 245 Child Development II (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course examines the growth and development of children during early and middle childhood. Emphasis is placed on factors influencing physical, cognitive, and psychosocial growth and change. Upon completion, students should be able to demonstrate an understanding of early and middle child development.

**PSY 246 Adolescent Psychology (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course provides an overview of the behavior patterns, life changes, and social issues that accompany the developmental stage of adolescence. Topics include developmental theories; physical, cognitive and psychosocial growth; transitions to young adulthood; and sociocultural factors that influence adolescent roles in home, school and community. Upon completion, students should be able to identify typical and atypical adolescent behavior patterns as well as appropriate strategies for interacting with adolescents. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**PSY 249 Psychology of Aging(3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course covers the particular needs and behaviors of the maturing adult. Emphasis is placed on psychosocial processes; biological and intellectual aspects of aging; adjustments to retirement, dying, bereavement; and the stereotypes and misconceptions concerning the elderly. Upon completion, students should be able to show an understanding of the psychological factors related to the aging process. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**PSY 259 Human Sexuality (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course provides the biological, psychological, and sociocultural aspects of human sexuality and related research. Topics include reproductive biology, sexual and psychosexual development, sexual orientation, contraception, sexually transmitted diseases, sexual disorders, theories of sexuality, and related issues. Upon completion, students should be able to demonstrate an overall knowledge and understanding of human sexuality. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**PSY 281 Abnormal Psychology (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the

study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

**PSY 285 Psychological Statistics (3-0-0-3)**

Prerequisites: PSY 150, MAT 161

Corequisites: None

This course introduces the study of descriptive and inferential statistics and their use in psychological research. Topics include measures of central tendency, variability and correlation, probability, sampling, hypothesis testing, and analysis of variance. Upon completion, students should be able to use statistical methods in the analysis of psychological data.

**PSY 292 Selected Topics in Psychology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

**PSY 293 Selected Topics in Psychology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

**READING****RED 080 Intro to College Reading (3-2-0-4)**

Prerequisites: appropriate test scores

Corequisites: None

This course introduces effective reading and inferential thinking skills in preparation for RED 090. Emphasis is placed on vocabulary, comprehension, and reading strategies. Upon completion, students should be able to determine main ideas and supporting details, recognize basic patterns of organization, draw conclusions, and understand vocabulary in context. *This course does not satisfy the developmental reading prerequisite for ENG 111 or ENG 111A.*



**RED 090 Improved College Reading (3-2-0-4)**

Prerequisites: RED 080

or appropriate placement test score

Corequisites: None

This course is designed to improve reading and critical thinking skills. Topics include vocabulary enhancement; extracting implied meaning; analyzing author's purpose, tone, and style; and drawing conclusions and responding to written material. Upon completion, students should be able to comprehend and analyze college-level reading material. *This course satisfies the developmental reading prerequisite for ENG 111 or ENG 111A.*

**RED 111 Crit Reading for College (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is designed to enhance critical reading skills. Topics include vocabulary enrichment, reading flexibility, metacognitive strategies, and advanced comprehension skills, including analysis and evaluation. Upon completion, students should be able to demonstrate comprehension and analysis and respond effectively to material across disciplines.

**RELIGION****REL 110 World Religions (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**REL 111 Eastern Religions (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the major Asian religious traditions. Topics include Hinduism, Buddhism, Taoism, Confucianism, and Shinto. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**REL 112 Western Religions (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the major western religious traditions. Topics include Zoroastrianism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**REL 211 Intro to Old Testament (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**REL 212 Intro to New Testament (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a survey of the literature of first century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**REL 221 Religion in America (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is an examination of religious beliefs and practice in the United States. Emphasis is placed on mainstream religious traditions and non traditional religious movements from the Colonial period to the present. Upon completion, students should be able to recognize and appreciate the diversity of religious traditions in America. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**SCIENCE****SCI 090 Skills for the Sciences (2-2-0-3)**

Prerequisites: None

Corequisites: MAT 060 and RED 090 or departmental approval or appropriate test scores

This course is designed to provide fundamental skills necessary for entry into college-level science courses. Topics include scientific vocabulary, measurement, scientific notation, the scientific method for solving problems, collaborative skills, and applications to various areas of science. Upon completion, students should be able to demonstrate a readiness for college-level science courses.

**SCI 110 Principles of Science (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces basic principles of chemistry, physics, and biology. Emphasis is placed



on chemical reactions, energy forms, and ecological studies. Upon completion, students should be able to demonstrate mastery of the scientific method of thought and a basic understanding of chemistry, physics and biology.

## SOCIOLOGY

### SOC 100 Concepts in Sociology (3-0-0-3)

Prerequisites: None

Corequisites: None

This course examines the basic concepts of sociology from the perspective of the individual as a member of society. Topics include an understanding of society, culture, collective behavior, community life, social institutions, social change, and the effect of social life on human behavior. Upon completion, students should be able to demonstrate knowledge of the impact of social interaction on institutions, groups, and individuals. *This course is intended for certificate and diploma programs.*

### SOC 103 Family Living (3-0-0-3)

Prerequisites: None

Corequisites: None

This course introduces various aspects of the contemporary American family and related intimate lifestyles. Topics include courtship, mate selection, marriage, parenting, sexuality, and family relationships. Upon completion, students should be able to identify practical issues and decisions relating to marriage and similar intimate relationships. *This course is intended for certificate and diploma programs*

### SOC 105 Social Relationships (3-0-0-3)

Prerequisites: None

Corequisites: None

This course is designed to study social relations and human behavior in all aspects of society. Emphasis is placed on the individual in the family, educational setting, and workplace. Upon completion, students should be able to apply knowledge about human behavior to improve inter-personal and job effectiveness. *This course is intended for certificate and diploma programs.*

### SOC 210 Introduction to Sociology (3-0-0-3)

Prerequisites: RED 090

Corequisites: None

This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

### SOC 213 Sociology of the Family (3-0-0-3)

Prerequisites: RED 090

Corequisites: None

This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. This course is also available through the Virtual Learning Community (VLC).*

### SOC 215 Group Processes (3-0-0-3)

Prerequisites: None

Corequisites: None

This course introduces group processes and dynamics. Emphasis is placed on small group experiences, roles and relationships within groups, communication, cooperation and conflict resolution, and managing diversity within and among groups. Upon completion, students should be able to demonstrate the knowledge and skills essential to analyze group interaction and to work effectively in a group context. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### SOC 220 Social Problems (3-0-0-3)

Prerequisites: RED 090

Corequisites: None

This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.*

### SOC 225 Social Diversity (3-0-0-3)

Prerequisites: RED 090

Corequisites: None

This course provides a comparison of diverse roles, interests, opportunities, contributions, and experiences in social life. Topics include race, ethnicity, gender, sexual orientation, class, and religion. Upon completion, students should be able to analyze how cultural and ethnic differences evolve and how they affect personality development, values, and tolerance. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/ behavioral sciences.*



**SOC 230 Race and Ethnic Relations (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course includes an examination of the various aspects of race and ethnicity and how these lead to different experiences, opportunities, problems, and contributions. Topics include prejudice, discrimination, perceptions, myths, stereotypes, and intergroup relationships. Upon completion, students should be able to identify and analyze relationships among racial and ethnic groups within the larger society. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**SOC 240 Social Psychology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course examines the influence of culture and social groups on individual behavior and personality. Emphasis is placed on the process of socialization, communication, conformity, deviance, interpersonal attraction, intimacy, race and ethnicity, small group experiences, and social movements. Upon completion, students should be able to identify and analyze cultural and social forces that influence the individual in a society. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**SOC 242 Sociology of Deviance (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course provides an overview of deviant behavior and the processes involved in its definition, causation, prevention, control and treatment. Topics include theories of causation, social control, delinquency, victimization, criminality, the criminal justice system, punishment, rehabilitation, and restitution. Upon completion, students should be able to identify and analyze issues surrounding the nature and development of social responses to deviance. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**SPANISH****SPA 110 Introduction to Spanish (2-0-0-2)**

Prerequisites: RED 090

Corequisites: None

This course provides an introduction to understanding, speaking, reading, and writing Spanish. Emphasis is placed on pronunciation, parts of speech, communicative phrases, culture, and skills for language acquisition. Upon completion, students should be able to identify and apply basic grammar concepts, display cultural awareness, and communicate in simple phrases in Spanish.

**SPA 111 Elementary Spanish I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. This course is also available through the Virtual Learning Community (VLC).*

**SPA 112 Elementary Spanish II (3-0-0-3)**

Prerequisites: SPA 111

Corequisites: None

This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**SPA 120 Spanish for the Workplace (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course offers applied Spanish for the workplace to facilitate basic communication with people whose native language is Spanish. Emphasis is placed on oral communication and career-specific vocabulary that targets health, business, and/or public service professions. Upon completion, students should be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity.

**SPA 141 Culture and Civilization (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore issues related to the Hispanic world. Topics include historical and current events, geography, and customs. Upon completion, students should be able to identify and discuss selected topics and cultural differences related to the Hispanic world. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**SPA 151 Hispanic Literature (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: None

This course includes selected readings by Hispanic writers. Topics include fictional and non-fictional works by representative authors from a variety of genres and literary periods.



Upon completion, students should be able to analyze and discuss selected texts within relevant cultural and historical contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**SPA 161 Cultural Immersion (2-3-0-3)**

Prerequisites: SPA 111

Corequisites: None

This course explores Hispanic culture through intensive study on campus and field experience in a host country or area. Topics include an overview of linguistic, historical, geographical, sociopolitical, economic, and/or artistic concerns of the area visited. Upon completion, students should be able to exhibit first-hand knowledge of issues pertinent to the host area and demonstrate understanding of cultural differences. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**SPA 181 Spanish Lab 1 (0-2-0-1)**

Prerequisites: None

Corequisites: SPA 111

This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. This course is highly recommended for all students taking SPA 111 who are not native speakers or who have not previously studied Spanish. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**SPA 211 Intermediate Spanish I (3-0-0-3)**

Prerequisites: SPA 112

Corequisites: None

This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**SPA 212 Intermediate Spanish II (3-0-0-3)**

Prerequisites: SPA 211

Corequisites: None

This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. *This course has been approved to satisfy the*

*Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**SURVEYING**

**SRV 110 Surveying I (2-6-0-4)**

Prerequisites: EGR 115 and MAT 121,

MAT 161, MAT 171, or MAT 175

Corequisites: None

This course introduces the theory and practice of plane surveying. Topics include measuring distances and angles, differential and profile leveling, compass applications, topography, and mapping. Upon completion, students should be able to use/care for surveying instruments, demonstrate field note techniques, and apply the theory and practice of plane surveying.

**SRV 111 Surveying II (2-6-0-4)**

Prerequisites: SRV 110

Corequisites: None

This course introduces route surveying and roadway planning and layout. Topics include simple, compound, reverse, spiral, and vertical curves; geometric design and layout; planning of cross-section and grade line; drainage; earthwork calculations; and mass diagrams. Upon completion, students should be able to calculate and lay out highway curves; prepare roadway plans, profiles, and sections; and perform slope staking.

**SRV 210 Surveying III (2-6-0-4)**

Prerequisites: SRV 110

Corequisites: None

This course introduces boundary surveying, land partitioning, and calculations of areas. Topics include advanced traverses and adjustments, preparation of survey documents, and other related topics. Upon completion, students should be able to research, survey, and map a boundary.

**SRV 220 Surveying Law (2-2-0-3)**

Prerequisites: SRV 110

Corequisites: None

This course introduces the law as related to the practice of surveying. Topics include surveyors' responsibilities, deed descriptions, title searches, eminent domain, easements, weight of evidence, riparian rights, and other related topics. Upon completion, students should be able to identify and apply the basic legal aspects associated with the practice of land surveying. Oral and written communications skills will be emphasized.

**SRV 230 Subdivision Planning (1-6-0-3)**

Prerequisites: SRV 111, SRV 210 and CIV 211

Corequisites: None

This course covers the planning aspects of residential subdivisions from analysis of owner and municipal requirements to plat layout and design. Topics include municipal codes, lot sizing, roads, incidental drainage, esthetic considerations, and other related topics. Upon completion, students should be able to prepare a set of subdivision plans.



**SRV 240 Topo/Site Surveying (2-6-0-4)**

Prerequisites: SRV 110

Corequisites: None

This course covers topographic, site, and construction surveying. Topics include topographic mapping, earthwork, site planning, construction staking, and other related topics. Upon completion, students should be able to prepare topographic maps and site plans and locate and stake out construction projects.

**SRV 250 Advanced Surveying (2-6-0-4)**

Prerequisites: SRV 111

Corequisites: None

This course covers advanced topics in surveying. Topics include photogrammetry, astronomical observations, coordinate systems, error theory, GPS, GIS, Public Land System, and other related topics. Upon completion, students should be able to apply advanced techniques to the solution of complex surveying problems.

**SRV 260 Field & Office Practices (1-3-0-2)**

Prerequisites: SRV 111

Corequisites: None

This course covers surveying project management, estimating, and responsibilities of surveying personnel. Topics include record-keeping, starting and operating a surveying business, contracts, regulations, taxes, personnel management, and professional ethics. Upon completion, students should be able to understand the requirements of operating a professional land surveying business.

**VETERINARY MEDICAL TECHNOLOGY****VET 110 Animal Breeds and Husbandry (2-2-0-3-)**

Prerequisites: None

Corequisites: None

This course provides a study of the individual breed characteristics and management techniques of the canine, feline, equine, bovine, porcine, ovine, caprine, and laboratory animals. Topics include physiological data, animal health management, and basic care and handling of animals. Upon completion, students should be able to identify breeds of domestic and laboratory animals, list physiological data, and outline basic care, handling, and management techniques.

**VET 120 Veterinary Anatomy & Physiology (3-3-0-4)**

Prerequisites: None

Corequisites: None

This course covers the structure and function of the animal body with emphasis on the similarities and differences among domestic animals. Emphasis is placed on the structure and function of the major physiological systems of domestic, laboratory, and zoo animals. Upon completion, students should be able to identify relevant anatomical structure and describe basic physiological processes for the major body systems.

**VET 122 Veterinary Zoology (3-3-0-4)**

Prerequisites: None

Corequisites: None

This course introduces basic concepts and principles of biology including cell structure, metabolism, genetics, evolution, and ecology. Topics include anatomy and physiology, phylogeny, and taxonomy of the animal kingdom. Upon completion, students should be able to explain basic life processes and identify evolutionary relationships among members of the animal kingdom.

**VET 123 Veterinary Parasitology (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers the common internal and external parasites of companion animals, livestock, selected zoo animals, and wild animals. Emphasis is placed on laboratory diagnosis of the most common forms of the parasite through fecal, urine, skin, and blood exams. Upon completion, students should be able to identify common parasites and discuss life-cycles, treatment and prevention strategies, and public health aspects of veterinary parasitology.

**VET 125 Veterinary Diseases I (2-0-0-2)**

Prerequisites: VET 120

Corequisites: None

This course introduces basic immunology, fundamentals of disease processes including inflammation, and common infectious diseases of animals and their prevention through immunization. Topics include fundamental disease processes, principles of medical therapy, immunologic processes, infections and zoonotic diseases of domestic animals, and prevention of disease. Upon completion, students should be able to describe basic disease and immunological processes, recognize infections and zoonotic diseases, and discuss prevention strategies.

**VET 126 Veterinary Diseases II (1-3-0-2)**

Prerequisites: VET 125

Corequisites: None

This course is a continuation of VET 125 and includes the study of basic disease processes, fundamentals of pathology, and other selected topics of veterinary medicine. Topics include histopathology, pathologic changes associated with common diseases of animals, necropsy procedures, specimen handling, and other selected material. Upon completion, students should be able to describe basic pathologic changes associated with disease, recognize histopathologic changes, and properly perform collection and submission of necropsy specimens.

**VET 131 Veterinary Laboratory Techniques I (2-3-0-3)**

Prerequisites: VET 123

Corequisites: VET 133

This course includes the fundamental study of hematology, hemostasis, and urinalysis. Emphasis is placed on basic hematology and urinalysis techniques, manual skill development, instrumentation, quality control, and applications to veterinary science. Upon completion, students should be able to perform manual and automated



CBCs, hemostatic assays, and complete urinalyses and maintain laboratory equipment and quality control.

### **VET 133 Veterinary Clinical Practice I (2-3-0-3)**

Prerequisites: None

Corequisites: VET 131, VET 120

This course introduces basic practices and techniques of the veterinary clinic and biomedical research fields for dogs, cats, and laboratory animals. Topics include physical exam, husbandry, housing, sanitation, restraint and handling, administration of medications, anesthesia and euthanasia techniques, grooming, and dentistry. Upon completion, students should be able to properly restrain, medicate, examine, groom, and maintain each of the species studied.

### **VET 137 Vet Office Practices (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course is designed to teach basic administrative techniques, client communication skills, and regulations pertaining to veterinary medicine. Topics include record keeping, telephone techniques, professional liability, office procedures, state and national regulatory laws, human relations, and animal welfare. Upon completion, students should be able to demonstrate effective communication techniques, office procedures, and knowledge of regulatory laws and issues relating to animal welfare. Additional studies will emphasize the use of computers and software in veterinary practice management.

### **VET 211 Veterinary Laboratory Techniques II (2-3-0-3)**

Prerequisites: VET 131

Corequisites: VET 213

This course covers advanced hematology, serology, immunology, and clinical chemistry. Topics include advanced hematologic, serologic, and immunologic test procedures: manual and automated clinical chemistry procedures: laboratory safety: and quality control. Upon completion, students should be able to collect, prepare, and analyze serum and plasma samples and outline quality control and safety procedures.

### **VET 212 Veterinary Laboratory Techniques III (2-3-0-3)**

Prerequisites: VET 211

Corequisites: VET 214

This course introduces the basic principles of microbiology, histology, and cytology. Emphasis is placed on collection of microbiological samples for culture and sensitivity and collection and preparation of samples for histological and cytological examination. Upon completion, students should be able to perform microbiological culture and sensitivity and evaluate cytology and histology specimens.

### **VET 213 Veterinary Clinical Practice II (1-9-0-4)**

Prerequisites: VET 133

Corequisites: None

This course covers basic radiography, anesthesia techniques, dentistry, sample collection and handling, surgical assistance and instrumentation, sterile techniques, and patient record keeping. Topics include basic radiography, injectable and gas anesthesia, dentistry, instrument identification and care, sterile surgical technique, specimen collection and processing, and maintenance of patient records. Upon completion, students should be able to take and process radiographs, administer and monitor anesthesia, assist in surgical procedures, collect specimens, and maintain surgical records. Students will continue to gain proficiency in the use of veterinary computer software programs for record keeping, inventory management, and practice economics.

### **VET 214 Veterinary Clinical Practice III (1-9-0-4)**

Prerequisites: VET 213

Corequisites: None

This course covers advanced anesthetic techniques, special radiographic techniques, advanced dentistry, sample collection and processing, bandaging, and emergency and critical care procedures. Topics include induction and maintenance of anesthesia, radiographic contrast studies, advanced dentistry, external coaptation, intensive care procedures, and advanced sample collection techniques. Upon completion, students should be able to demonstrate proficiency in sample collection, radiology, anesthesia, critical care and emergency procedures, and dentistry. Students will continue to gain proficiency in the use of veterinary computer software applications for patient record keeping, inventory management, and practice economics.

### **VET 215 Veterinary Pharmacology (3-0-0-3)**

Prerequisites: CHM 130, CHM 130A

Corequisites: VET 213

This course introduces drugs and other substances utilized in veterinary medicine. Emphasis is placed on drug classification and methods of action, administration, effects and side effects, storing and handling of drugs, and dosage calculations. Upon completion, students should be able to properly calculate and administer medications, recognize adverse reactions, and maintain pharmaceutical inventory and administration records. Students will demonstrate math competencies in algebraic computations necessary to successfully calculate drug dosages and perform conversions to the metric system.

### **VET 217 Large Animal Clinical Practice (2-3-0-3)**

Prerequisites: VET 120

Corequisites: VET 213

This course covers topics relevant to the medical and surgical techniques for the common domestic large animal species. Topics include physical exam, restraint, sample collection, bandaging,



emergency treatment, surgical and obstetrical procedures and instruments, herd health, and lameness topics. Upon completion, students should be able to safely perform restraint, examination, and sample collection; assist surgical, obstetrical, and emergency procedures; and discuss herd health.

### **VET 237 Animal Nutrition (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the principles of nutrition and their application to feeding practices of domestic, farm, and companion animals. Topics include basic nutrients and nutritional needs of individual species, proximate analysis, interpretation of food and feed labels, types of animal foods, and ration formulation. Upon completion, students should be able to select appropriate diets for animals in various stages of health and disease, analyze nutrition labels, and identify foods.

## **WELDING**

### **WLD 110 Cutting Processes (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness. This course also introduces the oxy-fuel welding and brazing processes.

### **WLD 112 Basic Welding Processes (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.

### **WLD 115 SMAW (Stick) Plate (2-9-0-5)**

Prerequisites: None

Corequisites: None

This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes. This course also introduces the concepts of welding metallurgy.

### **WLD 116 SMAW (Stick) Plate/Pipe (1-9-0-4)**

Prerequisites: WLD 115

Corequisites: None

This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions. This course also

includes the knowledge and skills that apply to welding pipe.

### **WLD 121 GMAW (MIG) FCAW/Plate (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions. This course also introduces TIG welding.

### **WLD 131 GTAW (TIG) Plate (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials. This course also introduces GTAW on pipe.

### **WLD 141 Symbols & Specifications (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

### **WLD 151 Fabrication I (2-6-0-4)**

Prerequisites: WLD 110, WLD 115, WLD 116, WLD 131

Corequisites: None

This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment. Student will also be able to fabricate projects.

### **WLD 261 Certification Practices (2-6-0-4)**

Prerequisites: WLD 115, WLD 121, VV-LD 131

Corequisites: None

This course covers certification requirements for industrial welding processes. Topics include techniques and certification requirements for pre-qualified joint geometry. Upon completion, students should be able to perform welds on carbon steel plate and/or pipe according to applicable codes.

## **ZOOLOGY - See Biology**

*This is the most current version available at printing time; however, items change rapidly. Please check with your advisor.*





# Gaston College

Opportunities For Life

2006-2008 Gaston College Academic Catalog

## XIII. Faculty And Staff

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FACULTY, STAFF

# FACULTY, STAFF

<b>Adair, Angela</b> Food Services Worker	2005	<b>Ausburn, Timothy</b> Network Server Specialist A.A.S., Cleveland Community College B.S., Limestone College	2005
<b>Adams, Barbara H.</b> Administrative Assistant to Vice President of Student Services A.A.S., Gaston College	1986	<b>Bajorek, Sylvia</b> Executive Director, Foundation/ Chief Development Officer B.A., Winthrop University	1997
<b>Adams, Kathie (RN)</b> Instructor, Nursing Assistant Program A.D.N., Forsyth Technical College	1995	<b>Ballard, David</b> Housekeeper	1996
<b>Adams, Renee</b> Printing Assistant (P/T)	2001	<b>Barrett-Ray, Linda F.</b> Shipping/Receiving Assistant A.A.S., Gaston College	1993
<b>Adkins, Carrietta</b> Vice President, Student Services B.S., East Carolina University M.Ed., UNC-Charlotte Ph.D., University of Texas	1997	<b>Bartle, Diane</b> Director, Corporate Education A.A., Gaston College B.A., Belmont Abbey College M.A.Ed., Western Carolina University	2005
<b>Al-Nasra, Moayyad M. (P.E., CPESC)</b> Chair/Instructor, Civil Engineering Technology B.Sc., M.Sc., Yarmouk University Ph.D., Old Dominion University	1992	<b>Beam, Marie Annette</b> Teacher, Early Childhood Development Center	1999
<b>Ammons, Don</b> Vice President, Academic Affairs B.S., Defiance College M.Ed., Ph.D., University of Toledo	2001	<b>Beaty, Billy</b> Preventive Maintenance Technician	2001
<b>Angeles, Orlando</b> Director, Facilities Management B.S., Mapua Institute of Technology	1998	<b>Bitter, Kevin</b> Instructor, Criminal Justice A.A., Barton County Community College B.A., Washburn University M.A., Wichita State University	2005
<b>Angelichio, Gerald</b> Instructor, Physical Science B.S., St. Lawrence University M.S., UNC-Charlotte	2003	<b>Blackburn, Kristin</b> Back-Up Systems Administrator B.S.B.A., UNC-Charlotte	2004
<b>Argent, Joseph</b> Instructor, English B.A., M.A., East Carolina University Ph.D., UNC-Greensboro	1996	<b>Blankenship, Kristine (D.V.M.)</b> Chair/Instructor, Veterinary Technology Program D.V.M., Ohio State University	1998
<b>Armstrong, Larry</b> Housekeeper	2003	<b>Blanton, Robert A.</b> Chair/Instructor, Social/Behavioral Sciences A.A., Mars Hill College B.S., M.A., Appalachian State University	1969
<b>Armstrong, Melissa M.</b> Chair/Instructor, Science B.S., Davidson College Ph.D., University of Tennessee	1991	<b>Blount, Ross</b> Instructor, Social/Behavioral Sciences B.A., Lyon College M.S., Iowa State University	2000
<b>Arthurs, Janet B. (R.N.)</b> Instructor, Associate Degree Nursing B.S.N., UNC-Chapel Hill M.S.N., UNC-Greensboro	1983	<b>Bookout, Brian</b> Instructor, Social/Behavioral Sciences A.A., Gaston College B.A., UNC-Charlotte M.A., Appalachian State University	2002
<b>Attaway, Victoria</b> Continuing Education Registration & Records Specialist A.A.S., Gaston College	1999	<b>Brabham, Sherry</b> Instructor, Social/Behavioral Sciences A.A., USC-Salkehatchie B.S., USC-Columbia M.A., UNC-Charlotte	2003



<b>Brackett, Nancy</b> Job Developer/Coordinator, Cooperative Education B.S., Atlantic Christian College	<b>2003</b>	<b>Cagle, Joe N.</b> Chair/Instructor, Criminal Justice & Paralegal B.A., Olivet College M.A., Goddard College J.D., Wake Forest University L.L.M., University of Mississippi M.A.R., Liberty University	<b>1993</b>
<b>Bradley, Lois B. (R.N.)</b> Chair/Instructor, Associate Degree Nursing B.S.N., Lenoir-Rhyne M.Ed., UNC-Charlotte	<b>1981</b>	<b>Caldwell, Chris</b> Housekeeper	<b>2002</b>
<b>Brassell, Erin</b> Instructor, Early Childhood Education B.S., Pennsylvania State University M.Ed., University of Pittsburgh	<b>2004</b>	<b>Cameron, Edgar M.</b> Instructor, Electrical/Electronics Technology (Physics) A.A.S., Gaston College B.S., Western Carolina University	<b>1976</b>
<b>Brigham, David</b> Manager, BioNetwork BioEd Center B.S., Evangel College M.S., Colorado State University Ph.D., Oklahoma State University	<b>2004</b>	<b>Cantrell, James</b> Director, Network Services, Technology Services A.A.S., Gaston College	<b>2000</b>
<b>Brooks, Cindy</b> Accounts Receivable Specialist A.A.S., Gaston College	<b>1993</b>	<b>Capinig, Agustin</b> Housekeeper B.S.M.E., National University, Manila	<b>2004</b>
<b>Broome, Tonia</b> Instructor, Mathematics B.A., M.A., UNC-Charlotte	<b>1996</b>	<b>Carpenter, Faye</b> Lead Housekeeper	<b>1999</b>
<b>Brown, Gail</b> Facilitator, Basic Law Enforcement Training	<b>1998</b>	<b>Casey, Michael</b> Instructor, Biology B.A., Carson-Newman College M.A., Appalachian State University	<b>2000</b>
<b>Brown, Pearlie M.</b> Public Services Librarian B.S., M.L.S., N.C. Central University Ed.D., Nova University	<b>1966</b>	<b>Cash, Mechelle</b> Secretary, Department for EMS Education A.A.S., Gaston College	<b>2004</b>
<b>Brown-Estes, Judy</b> Administrative Assistant (Evening), East Campus (P/T) A.S., Middle Georgia College	<b>2005</b>	<b>Chaffin, Troy F.</b> Instructor, Developmental Mathematics B.A., University of Florida	<b>1974</b>
<b>Bruce, Joy F. (CPA, CFE)</b> Instructor, Accounting B.A., North Carolina State University M.S., Appalachian State University	<b>1992</b>	<b>Childers, Raphonza (R.N.)</b> Instructor, Practical Nursing Program, LC A.A.S., Gaston College B.S.N., UNC-Charlotte M.S.N., UNC-Greensboro	<b>2000</b>
<b>Buff, Sam</b> Textile Testing Specialist, Textile Technology Center, East Campus M.B.A., Pfeiffer University	<b>2005</b>	<b>Church, Maggie</b> Instructor, Biology B.S., M.A., Appalachian State University	<b>2003</b>
<b>Burgin, William L., Jr.</b> Chair/Instructor, Mathematics B.A., M.A., UNC-Charlotte	<b>1991</b>	<b>Clay, Rex</b> Director, Institutional Effectiveness B.S., Marshall University M.A., UNC - Chapel Hill Ed.D., North Carolina State University	<b>1995</b>
<b>Butts, Patricia M.</b> Bookstore Assistant	<b>1993</b>	<b>Clemmer, Mary G.</b> Instructor, Information Technology A.B., Lenoir-Rhyne College M.A., Appalachian State University	<b>1982</b>
<b>Byrd, Michelle</b> Instructor, Office Systems Technology B.S.B.A., UNC-Charlotte M.B.A., University of Phoenix	<b>2005</b>	<b>Cloninger, Michael</b> Chair/Instructor, Automotive Technology A.A.S., Gaston College B.S., Western Carolina University	<b>1995</b>
<b>Cadenhead, Brenda</b> Cook, Early Childhood Development Center	<b>2000</b>		

# FACULTY, STAFF

<b>Cochran, Paula</b> Secretary, Student Services A.F.A/A.A., Gaston College	<b>2004</b>	<b>Davis, April</b> Teacher, Early Childhood Development Center A.A.S., Gaston College	<b>2005</b>
<b>Cody, Bernadette</b> Instructor, Developmental Reading B.S., M.Ed., Columbus State University	<b>2000</b>	<b>Davis, Beverly A. (R.N.)</b> Chair/Instructor, Practical Nursing Program, LC B.S.N., Lenoir-Rhyne College M.S.N., UNC-Charlotte	<b>1987</b>
<b>Cole, Richard M.</b> Audio Visual Specialist B.S., M.A., Appalachian State University	<b>1978</b>	<b>Davis, Louise B.</b> Registration and Records Specialist A.A.S., Gaston College	<b>1999</b>
<b>Cooke, Harry</b> Director, Libraries B.S., M.A., Appalachian State University M.S.L.S., N.C. Central University Ed.D., Duke University	<b>2001</b>	<b>Day-Lowe, Sharon</b> Technical Services Specialist, Library A.A., Gaston College B.S., Appalachian State University	<b>1999</b>
<b>Cope, Theresa</b> Teacher, Early Childhood Development Center A.A.S., Gaston College	<b>2001</b>	<b>Deal, Cherry</b> Instructor, Developmental Mathematics B.S., Western Carolina University	<b>2001</b>
<b>Cox, Virgil G.</b> Dean, Engineering & Industrial Technologies/Chief Educational Technology Officer B.S., M.S.E.E., Massachusetts Institute of Technology Ocean Engineer, Massachusetts Institute of Technology	<b>1987</b>	<b>Dedmon, Paula H.</b> Instructor, Biology B.S., M.A., Winthrop University	<b>1991</b>
<b>Coy, Jill</b> Admissions Coordinator, Health Programs (P/T) A.D.N., Gardner-Webb University M.A., Webster University	<b>2004</b>	<b>Dellinger, Amy L.</b> Accounting Assistant/Accounts Payable A.A.S., Cleveland Community College	<b>1997</b>
<b>Craig, Calvin</b> Information Access Librarian B.A., UNC-Charlotte M.S.L.S., UNC-Chapel Hill	<b>2001</b>	<b>Dellinger, Dewey D.</b> Dean, Liberal Arts and Sciences B.S., N.C. State University M.A., UNC-Charlotte Ph.D., N.C. State University	<b>1990</b>
<b>Creed, Natalie M.</b> Instructor, Mathematics B.S., N.C. Central University M.A., University of Michigan	<b>1995</b>	<b>Dellinger, Lynn R.</b> Assistant Registrar A.S.S., Lenoir Community College B.S., Gardner-Webb University	<b>1995</b>
<b>Crosby, Dennis</b> Coordinator, Criminal Justice Academy (P/T) A.A., Gaston College B.S., Gardner-Webb University	<b>2004</b>	<b>Dellinger, Michael</b> Supervisor, Grounds Maintenance	<b>1999</b>
<b>Crow, Kay T.</b> Administrative Assistant to Vice President for Academic Affairs Georgia Southern University	<b>1989</b>	<b>Denton, Carol</b> Coordinator-Employee Services and Benefits A.A., Gaston College B.A., Sacred Heart College	<b>1998</b>
<b>Davis, Amy</b> Counselor, Special Needs B.A., High Point University M.S., Florida State University	<b>2001</b>	<b>Denton, Will</b> PC Technician, Technology Services	<b>2004</b>
<b>Davis, Ann</b> Facilitator, Regional Emergency Services Training Center, Fire Protection Technology, & Fire/Rescue Training	<b>1996</b>	<b>Depew, Beth</b> Secretary, Human Resources	<b>1999</b>
		<b>DiBartolo, Brian</b> Instructor, Geology & Geography B.S., James Madison University M.S., University of Tennessee	<b>2000</b>
		<b>DiBartolo, Cheryl</b> Instructor, Social/Behavioral Sciences B.A., University of Kentucky M.B.S., University of Colorado	<b>2001</b>



<b>Dillion, Mary Ellen</b> Secretary, Life Skills A.A.S., Gaston College	<b>2005</b>
<b>Dills, Ron</b> Maintenance Technician, East Campus	<b>2005</b>
<b>Dixon, Sylvia</b> Administrative Assistant-President's Office & Foundation A.A.S., Gaston College	<b>2003</b>
<b>Dobbins, Gerri</b> Instructor, English B.A., M.A., Western Carolina University	<b>2004</b>
<b>Dockery, Darrell</b> Grounds Technician	<b>2003</b>
<b>Dotson, Kathy H.</b> Director, Administrative Systems, Technology Services A.A.S., Gaston College B.S., Gardner-Webb University	<b>1989</b>
<b>Duncan, Jane (R.N.)</b> Chair/Instructor, Nursing Assistant Program B.S.N., University of S.C. at Columbia	<b>1992</b>
<b>Duncan, Karen</b> Chair/Instructor, Office Systems Technology B.S., UNC-Charlotte M.A., Appalachian State University	<b>1999</b>
<b>Dungan, Ben</b> Coordinator-Development, WSGE Radio Station B.S., N.C. State University	<b>2005</b>
<b>Dyer, Tanya (R.N.)</b> Instructor, Office Systems Technology/Medical B.S.N., UNC-Charlotte	<b>2004</b>
<b>Eaker, Harold</b> Security Officer A.A., Gaston College	<b>2001</b>
<b>Elliott, Anita</b> Financial Aid Specialist A.A.S., Surry Community College B.S., Gardner-Webb University	<b>2005</b>
<b>Elliott, Ann</b> Instructor, Psychology A.A., Cleveland Community College B.S., M.A., Gardner-Webb University	<b>2005</b>
<b>Elliott, Carol M.</b> Administrative Assistant, LC A.A.S., Gaston College	<b>1991</b>
<b>Ellis, Rebecca</b> Housekeeper	<b>1989</b>
<b>English, Donna</b> Instructor, Architectural Technology A.A., A.A.S., Isothermal Community College B.S., Western Carolina University	<b>1995</b>

<b>Erickson, John</b> Coordinator, Learning Center B.A., M.A., UNC-Charlotte	<b>1998</b>
<b>Essex-Fraser, Phyllis</b> Instructor, Biology B.Sc., Acadia University M.Sc., University of Guelph	<b>2003</b>
<b>Ewing, Penny</b> Instructor, Medical Assisting/Phlebotomy A.A.S., Gaston College	<b>2004</b>
<b>Fannin, Jennifer</b> Instructor, Biology B.S., M.A., Marshall University	<b>2004</b>
<b>Ferguson, Elaine</b> Instructor, Business/Accounting B.A., Belmont Abbey College M.A., Gardner-Webb University	<b>2005</b>
<b>Finch, John</b> Shipping & Receiving Supervisor A.B., Belmont-Abbey College M.P.A., N.C. State University	<b>2000</b>
<b>Fisher, Patricia</b> Teacher, Early Childhood Development Center A.A.S., Gaston College	<b>1997</b>
<b>Ford, Gail</b> Counselor, LC B.A., Gardner-Webb University M.A., Appalachian State University	<b>2003</b>
<b>Ford, Jason W.</b> Distance Education Specialist A.A., Art Institute of Atlanta	<b>1999</b>
<b>Foster, Peggy S.</b> Director, Human Resources A.A.S., Piedmont Technical College B.S., Limestone College M.P.A., UNC-Charlotte	<b>1988</b>
<b>Fowler, John</b> Process Technician Textile Technology Center, East Campus A.A., NC Center for Applied Textile Technology	<b>2005</b>
<b>Fowler, Kelly</b> Associate Dean, Liberal Arts & Sciences/Instructor, Mathematics B.S., M.A., Appalachian State University	<b>1996</b>
<b>Fox, Melissa</b> Secretary, Community Education A.A.S., Gaston College	<b>2003</b>
<b>Freeman, Gary W.</b> Chair/Instructor, Art A.F.A., Gaston College B.S., M.A., East Carolina University	<b>1982</b>

# FACULTY, STAFF

<b>Freeman, Karen Q.</b> Teacher, Early Childhood Development Center A.A.S., Gaston College	<b>1984</b>	<b>Green, Mary J. (CPA)</b> Instructor, Accounting A.S., Columbia State University B.S., University of South Carolina M.B.A., Winthrop University	<b>1999</b>
<b>Galloway, June R.</b> Teacher, Early Childhood Development Center A.A.S., Gaston College	<b>1987</b>	<b>Greene, Vicki K.</b> Academic Advisor A.A.S., Gaston College B.S., Gardner-Webb University	<b>1991</b>
<b>Garvin, Betty B.</b> Instructor, Medical Assisting Program A.A.S., Gaston College B.T., Appalachian State University	<b>1988</b>	<b>Greer, Linda L.</b> Vice President, Economic and Workforce Development B.S., M.Ed., Indiana University of PA Ed.D., Nova Southeastern University	<b>1992</b>
<b>Geiger, Peggy</b> Instructor, Science B.S., University of Rochester M.S., Ph.D., Columbia University	<b>2001</b>	<b>Gregory, Steve</b> Campus Police Officer A.A., B.A., Gardner-Webb University Master/Divinity, Southeastern Seminary	<b>2003</b>
<b>Gelsinger, Kimberly</b> Director, Distance Education/AV B.S., UNC-Chapel Hill	<b>1999</b>	<b>Griffin, Joanne</b> Accounting Specialist	<b>1997</b>
<b>George, Dianne (R.N.)</b> Instructor, Associate Degree Nursing B.S.N., M.S.N., UNC-Charlotte	<b>1996</b>	<b>Griffin, Teresa</b> Accounts Receivable Specialist A.A.S., Gaston College	<b>2003</b>
<b>Gill, Pamela A.</b> Instructor, Foreign Languages A.B., Duke University M.A., Ph.D., UNC-Chapel Hill	<b>1992</b>	<b>Grigg, Jeannie</b> Payroll Specialist A.A.S., Gaston College	<b>1998</b>
<b>Glenn, Ethel</b> Assessment Retention Specialist-Life Skills A.A.S., Gaston College	<b>2002</b>	<b>Grimsley, Clifford</b> Instructor, Biology B.S., Francis Marion University M.A., Belmont Abbey College C.A.S. in Gerontology, UNC-Charlotte	<b>1998</b>
<b>Goodson, Jane</b> Instructor, Associate Degree Nursing A.A.S., Gaston College B.S.N., Gardner-Webb University M.S.N., UNC-Charlotte	<b>2001</b>	<b>Guerra, Dee</b> Administrative Assistant, Liberal Arts & Sciences A.A., Gaston College	<b>1999</b>
<b>Gore, Daniel</b> Instructor, Information Technology B.S., M.Ed., UNC-Charlotte	<b>2001</b>	<b>Gunnell, Juanita</b> Chair/Instructor, Dietetic Technician Program, LC B.S., UNC-Greensboro M.S., Winthrop University	<b>1999</b>
<b>Graham, Geraldine</b> Secretary, Institutional Effectiveness A.A., B.B.A., Montreat College	<b>2001</b>	<b>Hall, Cathis</b> Manager, WSGE Radio Station B.A., Shaw University M.A., N.C. Central University	<b>2006</b>
<b>Graham, Taffy</b> Learning Center Specialist, LC B.A., East Carolina University M.A., UNC-Charlotte	<b>2005</b>	<b>Hall, Steve R.</b> Supervisor, Systems Planning & Maintenance/ Assistant Director-Plant Operations Diploma, H.V.A.C., Gaston College	<b>1991</b>
<b>Grant, Virginia</b> Instructor, English B.A., M.A., Longwood University	<b>2005</b>	<b>Hambright, Myers T.</b> Instructor, Electrical/Electronics Technology (Physics) B.A., Elon College M.B.A., Winthrop University	<b>1974</b>
<b>Grayson, Debbie</b> Instructor, Nursing Assistant A.D.N., Gaston College	<b>2004</b>	<b>Hamby, Martha B.</b> Buyer/Purchasing Agent	<b>1987</b>



# FACULTY, STAFF

<b>Hamilton, Sandra J.</b>	<b>1994</b>
Cooperative Education & Student Employment Specialist A.A.S., Gaston College	
<b>Hardin, Larry</b>	<b>2005</b>
Campus Police Officer	
<b>Harmon, Ann</b>	<b>2005</b>
Instructor, Office Systems Technology B.S.S.A., UNC-Greensboro	
<b>Hatcher, Glenn</b>	<b>2002</b>
Instructor, English B.A., M.A., University of Mississippi	
<b>Helton, Deanna</b>	<b>2003</b>
Facilitator, Plant Operations A.A.S., Gaston College	
<b>Hendricks, George</b>	<b>2000</b>
Chair/Instructor, Electrical/Electronics Technology (Physics) A.A.S., Community College of the Air Force B.S., University of New Mexico M.E., University of Florida	
<b>Hibbard, Ann</b>	<b>2002</b>
Chair/Instructor, Therapeutic Massage Program, LC B.A., Mercer University CMT, Atlanta School of Massage and Florida School of Massage	
<b>High, Lora A.</b>	<b>1988</b>
Admissions Specialist A.A., Gardner-Webb University	
<b>Holcombe, Anna C.</b>	<b>1991</b>
Teacher, Early Childhood Development Center B.A., Sacred Heart College	
<b>Hollars, Elizabeth</b>	<b>2000</b>
Director, Community Education B.A., M.Ed., UNC-Charlotte	
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Instructor, Electronics/Computer Eng Tech B.S.E.E., Virginia Military Institute M.S.E.E., Ph.D., University of Texas-Arlington	
<b>Hopper, Alice D.</b>	<b>1978</b>
Admissions Specialist	
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Coordinator, Continuing Education Registration A.A.S., Gaston College B.S., Gardner-Webb University	
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Continuing Education Auditor A.A.S., Gaston College	
<b>Hoyle, Gail</b>	<b>1993</b>
Secretary, Community Education, LC	

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Secretary, Criminal Justice Academy (P/T) B.S., Western Carolina University	
<b>Huddin, Ralph (CPA)</b>	<b>2002</b>
Vice President, Finance, Operations, & Facilities B.S.B.A., University of Denver M.B.A., University of Colorado	
<b>Hudson, Michelle</b>	<b>1998</b>
Printing Assistant	
<b>Hughes, Marty (D.V.M.)</b>	<b>2003</b>
Instructor, Veterinary Technology Program B.A., University of Indianapolis M.P.A., Webster University D.V.M., College of Veterinary Medicine, N.C. State University	
<b>Humphries, Benjamin</b>	<b>2004</b>
Coordinator-Testing & Special Projects B.S., Gardner-Webb University	
<b>Issa, Joseph</b>	<b>2006</b>
Lab. Staff Associate - Science B.S., University of Guarulhos	
<b>Jackson, DeRee G.</b>	<b>1998</b>
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<b>Jenkins, Karen</b>	<b>1997</b>
Administrative Assistant, Business & Information Technology A.A.S., Gaston College	
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Instructor, Early Childhood Education B.A., Sacred Heart College M.S., North Carolina A & T State University	
<b>Johnson, Gary</b>	<b>2005</b>
Technology Specialist, East Campus A.A.S., DeVry Institute of Technology	
<b>Jones, Betsy H.</b>	<b>1979</b>
Dean, Business & Information Technology A.A.S., Gaston College B.S., Gardner-Webb University M.A., Appalachian State University	
<b>Jones, Louise</b>	<b>2002</b>
Secretary, Campus Police A.A.S., Gaston College	
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# FACULTY, STAFF

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B.S.N., University of South Carolina		A.A., Western Piedmont Community College	
M.A., Central Michigan University		B.S.B.A., UNC-Charlotte	
		M.B.A., Winthrop University	
		Ph.D., UNC-Greensboro	
<b>Justice, Jack</b>	<b>2005</b>	<b>Laughlin, Juliet</b>	<b>2002</b>
Evening Maintenance/Security, East Campus (P/T)		Coordinator, Student Programs	
		B.S., M.A., Appalachian State University	
<b>Keener, Laura B.</b>	<b>1988</b>	<b>Leak, Donnie</b>	<b>2006</b>
Teacher, Early Childhood Development Center		Housekeeping Supervisor	
A.A.S., Gaston College		B.A., UNC-Charlotte	
<b>Keever, Barbara</b>	<b>1999</b>	<b>Lev, Anat</b>	<b>1999</b>
Faculty Secretary, Health		Instructor, Biology	
		B.S.C., M.S.N., Biology, Ben-Gurion University	
<b>Keith, Joe</b>	<b>2002</b>	Ph.D., BioChemistry, Ben-Gurion University	
Dean, East Campus & Textile Technology Center			
B.S., Georgia Institute of Technology			
M.B.A., Ed.D., East Tennessee State University			
<b>Keller, Mike</b>	<b>2004</b>	<b>Lewis, Ungina</b>	<b>2005</b>
Instructor, EMS Education		Financial Aid/Admissions Specialist	
A.A.S., Emergency Medical Sciences		A.A.S., Gaston College	
<b>Key, Donna</b>	<b>2000</b>	<b>Looney, T. Gene</b>	<b>1988</b>
Instructor, Developmental Mathematics		Registration/Records Specialist, (P/T)	
B.S., UNC-Chapel Hill		B.F.A., University of Texas	
M.A., UNC-Charlotte			
<b>Kincaid, Brenda</b>	<b>1974</b>	<b>Lounsbury, Karen</b>	<b>2005</b>
Director, Cooperative Education & Student Employment		Career Coordinator, Early Childhood Education	
B.A., UNC-Charlotte		B.S., James Madison University	
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<b>King, Angela</b>	<b>2005</b>	<b>Love, Donna</b>	<b>2002</b>
Instructor, Associate Degree Nursing		Instructor, Office Systems Technology/WebMaster	
B.S.N., Gardner-Webb University		A.A.S., Gaston College	
M.S.N., UNC-Greensboro		B.A., M.A., UNC-Greensboro	
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<b>King, Belinda</b>	<b>1996</b>	<b>Lucas, Sandra</b>	<b>1999</b>
Instructor, Medical Assisting Program		Accounting Specialist/Equipment Coordinator	
A.A.S., Gaston College		A.A.S., Gaston College	
B.S., Pfeiffer University			
<b>King, Bonita</b>	<b>2004</b>	<b>Lutz, Stephanie</b>	<b>2000</b>
Adjunct Librarian		Secretary, Health, LC	
A.A.S., Caldwell Community College			
B.S., Gardner-Webb University			
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Instructor, Information Technology		Financial Aid Specialist	
B.S., Gardner-Webb University			
M.A., Appalachian State University			
<b>Lackey, Keith F. (R.L.S.)</b>	<b>1982</b>	<b>Lytton Jr., Billy</b>	<b>2001</b>
Instructor, Civil Engineering Technology		Chief of Police	
A.A.S., Gaston College		A.A., Gaston College	
B.S., North Carolina State University			
		<b>Mabry, Douglas S.</b>	<b>1991</b>
		Chair/Instructor, Air Conditioning, Heating, & Refrigeration	
		Diploma HVAC, Cleveland Community College	
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		Lead Teacher, Adult High School	
		B.A., UNC-Charlotte	
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		Instructor, Air Conditioning, Heating, & Refrigeration	
		B.S., Western Carolina University	



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<b>McClellan, Dan</b> Instructor, Broadcasting Technology B.A., Gardner-Webb University	<b>2005</b>	<b>Monroe, Syvana</b> Registration & Records Specialist A.A.S., Gaston College	<b>2000</b>
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<b>McGinnis, Heidimarie</b> Accountant A.A.S., Gaston College	<b>1987</b>	<b>Morton, Mary D.</b> Associate Dean, Liberal Arts & Sciences/Instructor, Social/Behavioral Sciences B.A., M.A., University of South Carolina M.A., Ph.D., Vanderbilt University	<b>1993</b>
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<b>McLaurin, Daniel</b> Maintenance Technician Diploma, Industrial Maintenance Diploma, Industrial Electronics A.A., York Technical College	<b>2000</b>	<b>Nalley, Amy</b> Teacher Assistant, Early Childhood Development Center	<b>2003</b>
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<b>Michael-Pickett, Stephanie</b> Director, Marketing, Public Relations, & Radio Station B.A., Drake University M.A., University of Portland	<b>1998</b>	<b>Oates, Peggy V.</b> Director, Financial Aid and Veterans Affairs B.S., M.B.A., Gardner-Webb University	<b>1994</b>
<b>Millen, Mack</b> Electrical Maintenance Technician A.A., York Technical College	<b>1997</b>	<b>Ochs, Melanie</b> Instructor, Veterinary Technology A.A.S., Gaston College	<b>2005</b>
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		<b>Pane, Michael</b> Instructor, Communications B.A., M.A., University of Montana	<b>2000</b>

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Food Services Worker		Chief GED Examiner/Testing Coordinator, Life Skills	
A.S., Gaston College		A.A., Gaston College	
<b>Patterson, Nancy</b>	<b>1999</b>	B.S., Gardner-Webb University	
Secretary, Marketing, Public Relations, & Radio Station		M.A., Gordon-Conwell Theological Seminary	
A.S., Kings College			
<b>Patterson, Robert W.</b>	<b>1982</b>	<b>Powell, Lisa</b>	<b>1998</b>
Lead Maintenance Technician		Bookstore Assistant	
<b>Pauley, Linc</b>	<b>2000</b>	A.A.S., Gaston College	
Instructor, Information Technology		<b>Powell, Michael</b>	<b>2000</b>
A.A., Gaston College		Instructor, English	
B.S., Wayland Baptist University		B.A., Western Carolina University	
M.A., Appalachian State University		M.A., Winthrop University	
<b>Payseur, Delores</b>	<b>1996</b>	<b>Pressley, Leslie</b>	<b>2005</b>
Lead Teacher, Basic Skills, LC		Instructor, Practical Nursing	
B.S., Gardner-Webb University		B.S.N., UNC-Charlotte	
<b>Pendleton, Ronnie L.</b>	<b>1995</b>	<b>Propst, Tonya</b>	<b>1998</b>
Plumber		Secretary, Life Skills, LC	
Vocational Diploma, Gaston College		A.A.S., Gaston College	
<b>Penley, Kandy D.</b>	<b>1980</b>	<b>Pruitt, Anthony</b>	<b>2004</b>
Secretary, Medical Assisting, Phlebotomy and		Secretary, Student Services	
Veterinary Medical Technology Programs		A.A.S. Gaston College	
A.A.S., Gaston College		<b>Queen, Patsy S. (R.N.)</b>	<b>1989</b>
<b>Perkins, Gwen</b>	<b>2005</b>	Instructor, Associate Degree Nursing	
Interim Director, Textile Technology Center,		B.S.Ed., B.S.N., Western Carolina University	
East Campus		M.S.N., University of Texas at Austin	
B.S., NC State University		<b>Randleman, J. Michael</b>	<b>1994</b>
<b>Pettus, Odell</b>	<b>2005</b>	Instructor, Criminal Justice & Paralegal	
Process Technician, Textile Technology Center,		A.A., Mars Hill College	
East Campus (P/T)		B.A., J.D., Wake Forest University	
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Administrative Assistant to Vice President for		Technical Specialist, East Campus	
Finance, Operations, & Facilities		<b>Raymond, Thomas T. (P.E.)</b>	<b>1993</b>
B.S., Western Carolina University		Chair/Instructor, Industrial & Engineering	
<b>Pittman, David</b>	<b>1999</b>	Systems Technology	
Lead Teacher, Community Education		B.S.I.E., University of Florida	
B.A., Sacred Heart College		M.B.A., University of Kentucky	
M.B.A., Gardner-Webb University		<b>Rayne, Tracy W.</b>	<b>1996</b>
<b>Platt, Marilyn G.</b>	<b>1991</b>	Accountant	
Chair/Instructor, Developmental Education		B.S., Meredith College	
B.A., M.A., UNC-Charlotte		M.S., Appalachian State University	
Developmental Specialist, ASU		<b>Reich, Ana</b>	<b>2003</b>
<b>Pollard, Robin</b>	<b>2005</b>	Teacher Assistant, Early Childhood Development Center	
Instructor, Early Childhood Education		<b>Reinhardt, Nicole</b>	<b>2005</b>
B.A., M.E., University of Florida		Secretary, Student Services	
<b>Porter, Judith</b>	<b>2005</b>	A.A.S., Gaston College	
Instructor, Music		<b>Reynolds, Ruffin</b>	<b>2001</b>
Bach. of Music, Baldwin-Walker College		Instructor, English, LC	
Master of Music, New England Conservatory		B.A., M.A., UNC-Charlotte	
<b>Porter, Nancy C.</b>	<b>1997</b>	<b>Rhodes, Daniel</b>	<b>2005</b>
Dean, Health Education		Product Development Specialist	
B.S.N., UNC-Chapel Hill		Textile Technology Center, East Campus	
M.S.N., UNC-Greensboro		B.S., NC State University	



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<b>Ross, Mary Beth</b> Director, Grants & Special Projects, Development Office A.B., LeMoyne College M.A., Ph.D., Syracuse University	<b>2004</b>
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<b>Sanders, Patricia A. (R.N.)</b> Instructor, Associate Degree Nursing B.S.N., Weber State University M.S.N., UNC-Greensboro	<b>1993</b>
<b>Scarlett, Michelle</b> Director, Early Childhood Development Center B.S., Western Carolina University	<b>2000</b>
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<b>Sellers, H. Duane</b> HVAC Technician Diploma, Gaston College	<b>1995</b>
<b>Sexton, Lawrence D.</b> Instructor, Developmental English B.A., Brooklyn College Developmental Specialist, ASU	<b>1989</b>
<b>Shariat, Sholeh</b> Instructor, Mathematics B.E., M.S., Youngstown State University M.S., University of Cincinnati	<b>1998</b>
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<b>Shellman, W. Mark</b> Chair/Instructor, Information Technology B.S., North Carolina State University M.S., Barry University	<b>1984</b>
<b>Sherrill, Audrey</b> Director, Counseling B.S., Wingate University M.A., UNC-Charlotte M.S.S., United States Sports Academy	<b>2003</b>
<b>Shoaf, Vernon</b> Curriculum Coordinator, BioNetwork BioEd Center B.S., M.B.A., East Carolina University	<b>2004</b>
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<b>Shook, Donna T.</b> Administrative Assistant, Technology Services A.A.S., Gaston College	<b>1985</b>
<b>Sigal, Marvin</b> Instructor, Biology M.S., Wright State University B.S., Ph.D., The Ohio State University	<b>1992</b>
<b>Sigmon, Deborah S.</b> Administrative Assistant to Vice President, Economic and Workforce Development A.A.S., Gaston College	<b>1997</b>
<b>Sipe, Everette</b> Campus Police Officer A.A.S., Cleveland Community College	<b>2002</b>
<b>Sisk, James (C.P.I.M.)</b> Chair/Instructor, Business Administration B.A., Dallas Baptist University M.S., Florida Institute of Technology	<b>1996</b>

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<b>Slifer, Rhonda</b> Teacher Assistant, Early Childhood Development Center	<b>2003</b>	<b>St. Clair, Rebecca</b> Associate Dean, Business & Information Technology/Instructor, Office Systems Technology A.A.S., Cleveland Community College B.T., M.A., Appalachian State University	<b>1989</b>
<b>Smith, Krista</b> Teacher, Early Childhood Development Center A.A.S., Gaston College	<b>1997</b>	<b>Stephenson, Carolyn</b> Administrative Assistant/Receptionist, East Campus	<b>2005</b>
<b>Smith, Martha Y.</b> Administrative Assistant, Industrial Technologies B.A., Central Wesleyan College	<b>1984</b>	<b>Stokes, Steven L.</b> Chair/Instructor, Machining Technology B.S., Southern Illinois University M.S., Northern Illinois University	<b>1990</b>
<b>Smith, Paula</b> Instructor, Art B.F.A., Kansas City Art Institute M.F.A., University of Illinois	<b>2000</b>	<b>Stone, Libby</b> Coordinator, Library Services, LC B.A., Erskine College M.L.I.S., UNC-Greensboro	<b>2005</b>
<b>Smith, Sherry J.</b> Supervisor, Business Office, LC B.S.B.A., UNC-Greensboro	<b>1987</b>	<b>Story, Jason</b> Instructor, Art B.A., Arkansas Tech University M.F.A., University of Memphis	<b>2005</b>
<b>Sowers, Sid</b> Instructor, Social/Behavioral Sciences A.A., Mitchell Community College B.A., UNC-Charlotte M.A., Appalachian State University	<b>2003</b>	<b>Stromberg, June</b> Human Resources Assistant	<b>2002</b>
<b>Sparrow, David</b> Gardener/Grounds Technician A.A.S., Catawba Valley Community College	<b>2002</b>	<b>Stroup, Edward R.</b> Grounds Technician	<b>1994</b>
<b>Spitler, Kent R.</b> Director, Department for EMS Education A.A.S., Clark Technical College B.S., Park College M.S. Ed., University of Dayton	<b>2001</b>	<b>Sturmer, William H.</b> Controller A.A., Miami Dade Community College B.B.A., Florida Atlantic University	<b>1996</b>
<b>Springer, Deedie</b> Secretary/Receptionist, Human Resources B.F.A., Western Carolina University	<b>2005</b>	<b>Thackston, Judith M. (R.N.)</b> Instructor, Associate Degree Nursing B.S.N., M.S.N., UNC-Charlotte	<b>1984</b>
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<b>Stagg, Nancy J.</b> Mailroom Assistant A.A., Gaston College	<b>1994</b>	<b>Tilton, Charles</b> Housekeeper	<b>2004</b>
<b>Standley, Evelyn M.</b> Administrative Assistant to President & Board of Trustees A.A.S., Gaston College	<b>1985</b>	<b>Todd, Patricia</b> Housekeeper	<b>1995</b>
<b>Stanley, Ann</b> Security Officer, LC	<b>1996</b>	<b>Tokura-Gallo, Hisayo</b> Instructor, Social Behavioral Sciences B.S., Toyo University, Japan M.A., University of Illinois	<b>2004</b>
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<b>Welder, Rosalind</b> Dean, Lincoln Campus B.S., M.A., Appalachian State University	<b>1998</b>
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<b>Whitley, Roger W.</b> Director, Basic Law Enforcement Training B.S., Mars Hill College	<b>1979</b>
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<b>Wray, Charles H.</b> Director, Purchasing A.A., Gaston College B.S., Appalachian State University	<b>1996</b>
<b>Wray, Michelle</b> Director, Enrollment Management/Admissions B.A., UNC-Chapel Hill M.A., Appalachian State University	<b>1999</b>
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<b>Wyont, Wanda</b> Chair/Instructor, Early Childhood Education B.S., Thomas Edison State College M.A., Lenoir Rhyne College	<b>1997</b>
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Mr. George Ball	Ms. Lee Simmons	Ms. Sharon Nichols
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Mr. Russell Keck	Dr. Dean Jones	Dr. Larry Galant
Mr. Porter McAteer	Mr. Ben Berry	Mr. Alex Hegenbart
Dr. Bruce Trammell	Mr. Jim Wright	
Mr. Paul Lunsford	Mr. Thomas Bennett	





# Gaston College

## Opportunities For Life

2006-2008 Gaston College Academic Catalog

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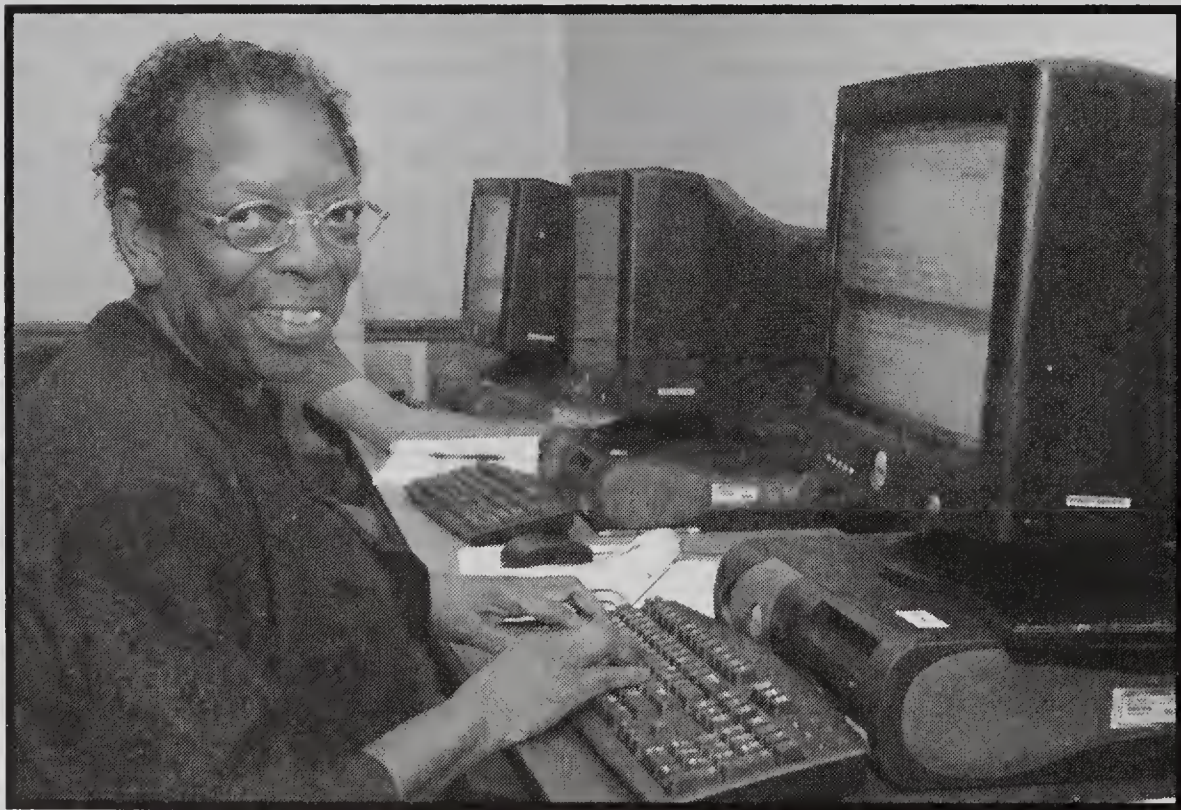
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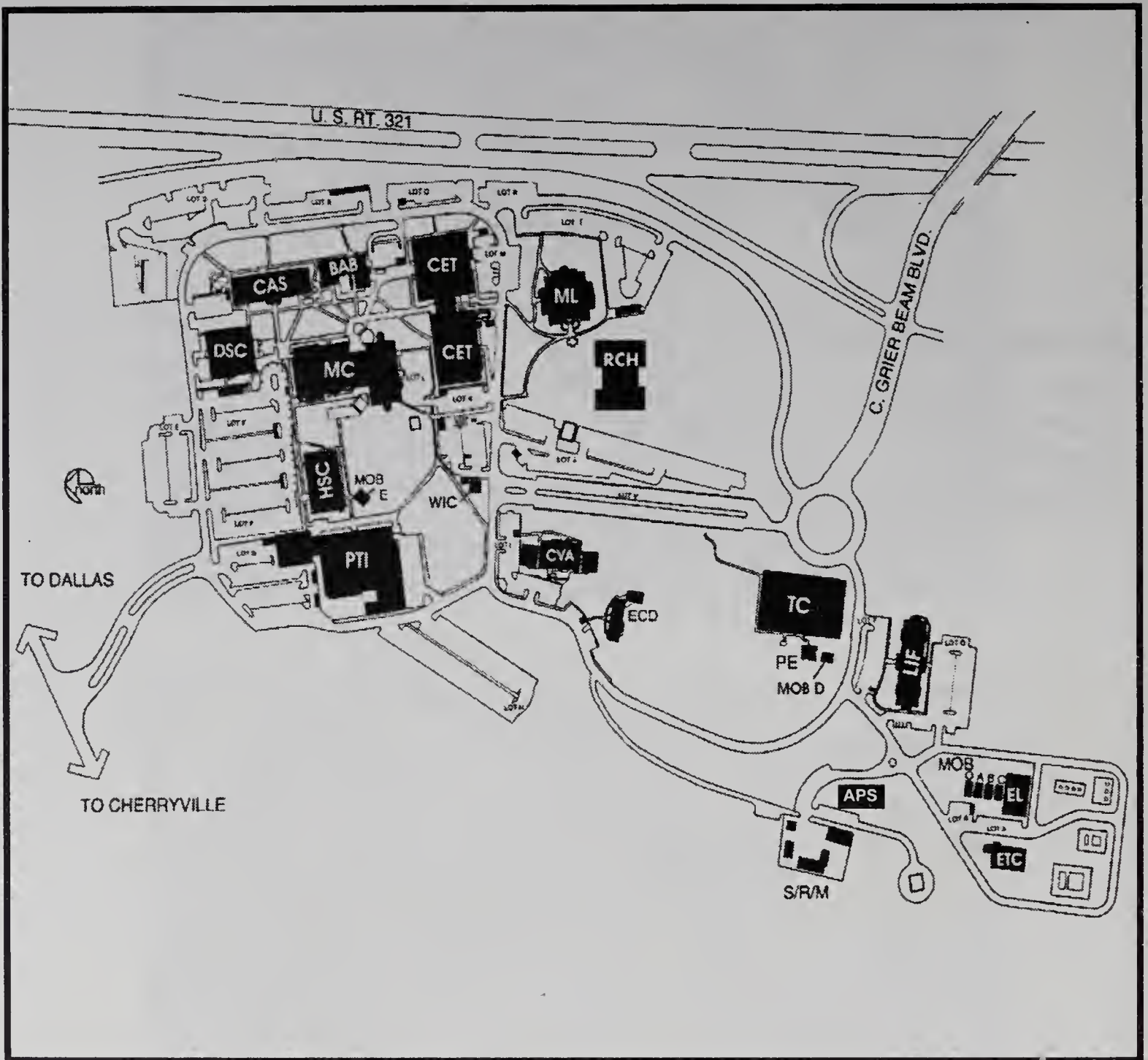
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CAMPUS MAPS, PHONE NUMBERS

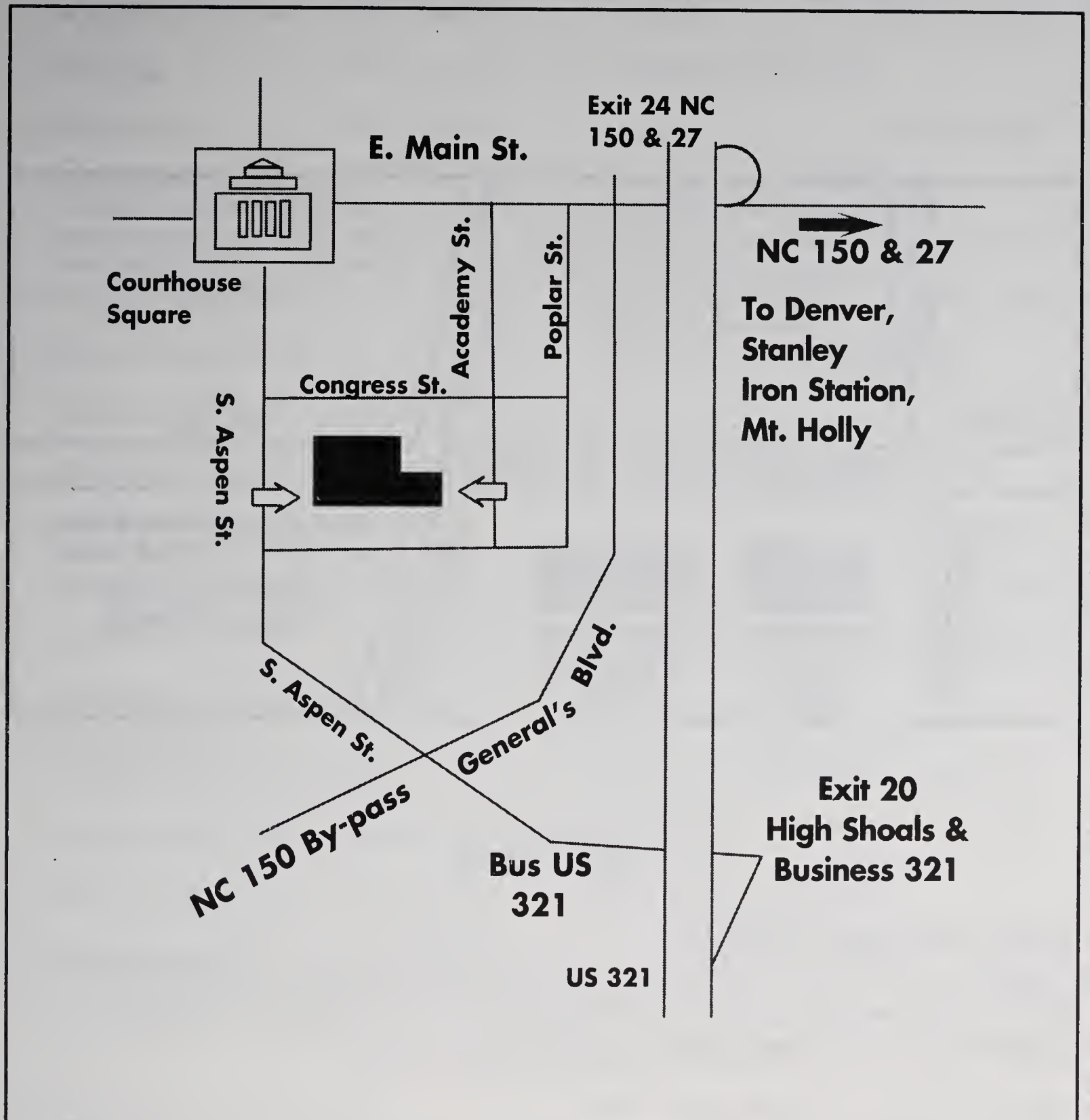
# Dallas Campus



APS	Albright Public Safety Building	HSC	Lena Sue Beam Health Sciences Ctr.
BAB	Beam Administration Building	LIF	Pearson Life Skills Building
CAS	Craig Arts & Sciences Building	MC	Myers Center
CET	Comer Engineering Technologies	ML	Morris Library
CVA	D. F. Beam Center for Visual Arts	MOB	Mobile Classrooms
DSC	Dalpiatz Student Success Center	PTI	Pharr Trade & Industrial Center
ECD	Early Childhood Development Ctr.	RCH	Rauch Science & Fine Arts Building
EL	Exercise Lab	S/R/M	Shipping/Receiving/ Maintenance
ETC	Regional Emergency Srvs. Training Ctr.	WIC	Wyss Information Center
HP	Health Promotion		



# Lincoln Campus



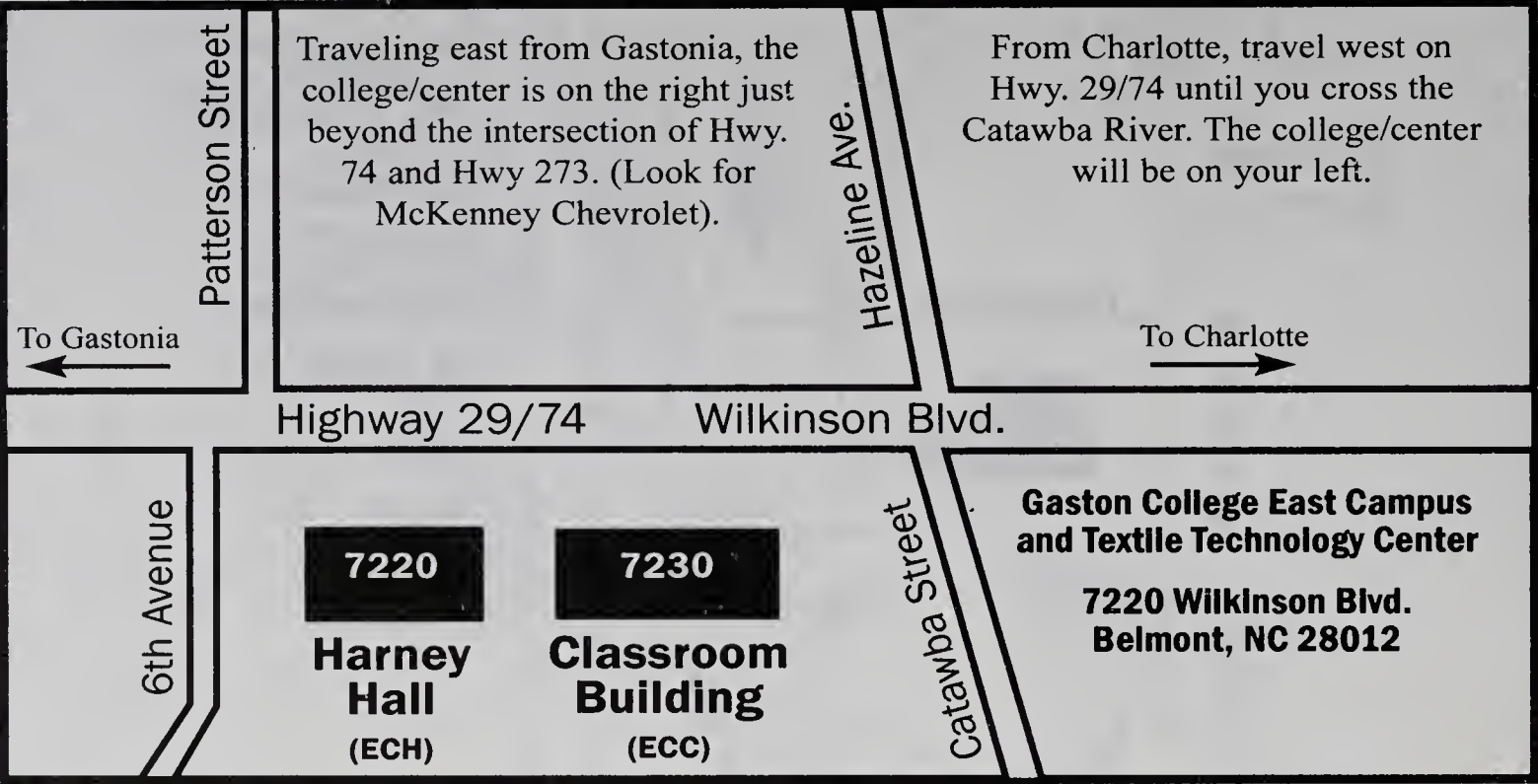
CAMPUS MAPS, PHONE NUMBERS

The Lincoln Campus of Gaston College is located at 511 South Aspen Street in Lincolnton, N.C.

From Gastonia: Travel North on 321. Take exit #20 (High Shoals /Lincolnton/ 321 Business exit). Turn left off exit ramp and travel North on US 321 Business for 4.6 miles. At interchange (US 321 Business/ NC 150) continue over bridge on S. Aspen St. to Lincolnton. The Lincoln Campus is another mile on the right.

# East Campus

## AND TEXTILE TECHNOLOGY CENTER



### DIRECTIONS

From Charlotte take I-85 South.  
 Take Exit 27 Belmont - Mount Holly. At top of exit ramp turn Left onto Hwy 273.  
 Go 1/4 mile and then turn left on Wilkinson Blvd. East Campus and Textile Technology Center approx 1/2 mile on the right

From Gastonia take I-85 North.  
 Take Exit 27 Belmont - Mount Holly. At top of exit ramp take a Right onto Hwy 273. Go 1/4 mile then take a left on Wilkinson Blvd. The East Campus and Textile Technology Center will be approx 1/2 mile on the right.



**DALLAS CAMPUS .....704-922-6200**

- Admissions .....704-922-6214
- Bookstore .....704-922-6428
- Business Office .....704-922-6410
- Cooperative Education ...704-922-6212
- Counseling .....704-922-6220
- Financial Aid .....704-922-6227
- Office of the Registrar/
- Student Records .....704-922-6232

**DIVISION OFFICES**

- Business & Information
- Technology .....704-922-6263
- Engineering Technologies 704-922-6296
- Health Education .....704-922-6379
- Industrial Technologies ..704-922-6381
- Liberal Arts & Sciences ..704-922-6311

**ECONOMIC AND WORKFORCE  
DEVELOPMENT  
(CONTINUING EDUCATION)**

- Community Education ...704-922-6251
- Traffic School .....704-922-6353
- Corporate Education ....704-922-6447
- Criminal Justice Academy  
.....704-922-6531
- Department for EMS Education  
.....704-922-6241
- Fire and Rescue Training .704-922-6257
- Small Business Center ...704-922-6449

**Life Skills**

- ABE/GED Learning Lab -
- Dallas .....704-922-6322
- ABE/GED Learning Lab -
- Lincoln .....704-748-1047
- Adult Basic Education  
.....704-922-6320
- Adult High School Diploma  
.....704-922-6319
- Basic Skills Classes ...704-922-6320
- English as a Second Language  
.....704-922-6352
- Human Resources Development  
.....704-922-6318
- Lincoln Campus .....704-748-1045

**Economic and Workforce Development  
(Continuing Education)  
Administrative Offices**

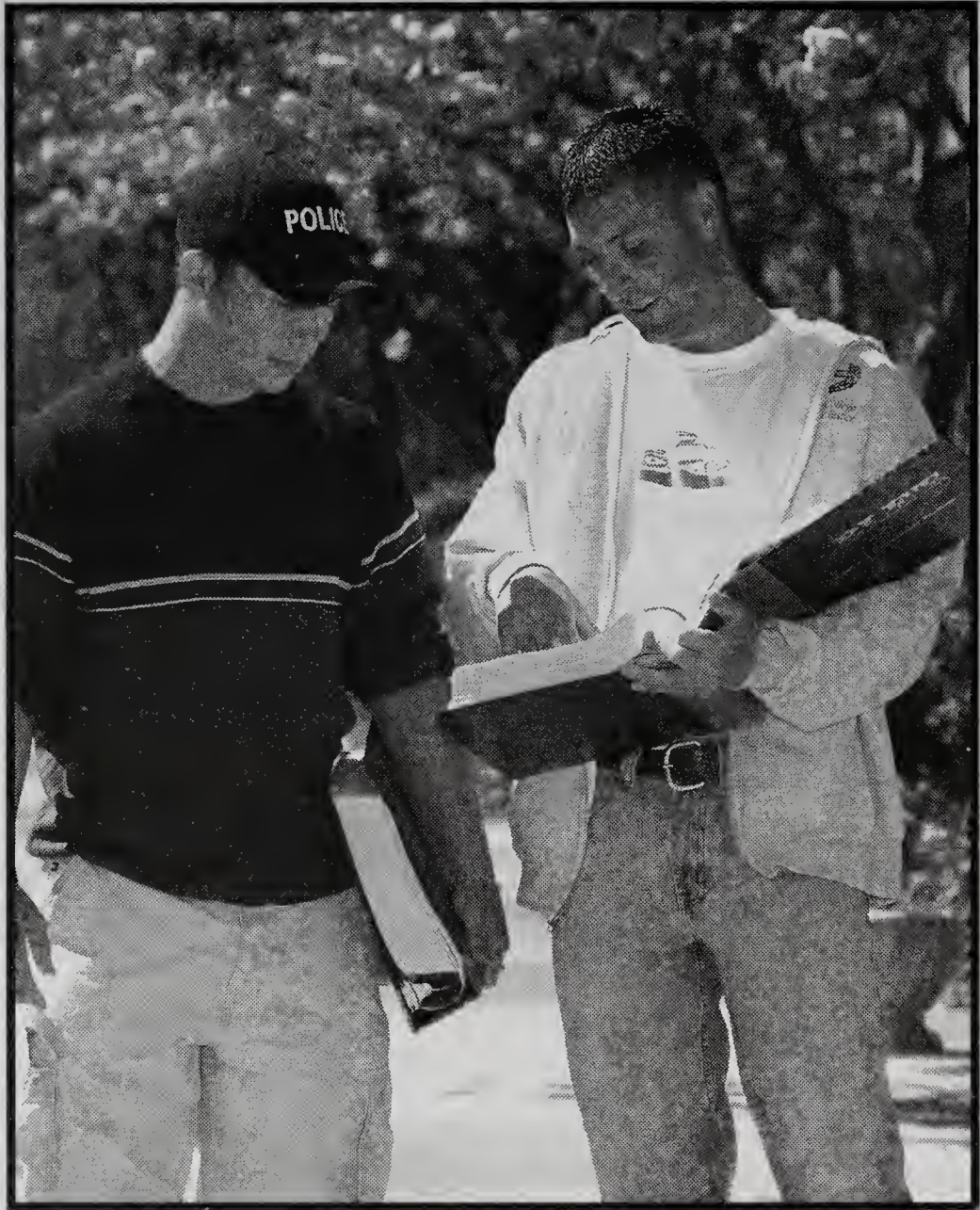
- Office of VP for Economic, Workforce  
Development .....704-922-6476
- Registration and Records  
.....704-922-6252 or 6496
- Class Auditor .....704-922-6347

**LINCOLN CAMPUS .....704-748-1040**

- Office of the Dean .....704-748-1055
- Business Office .....704-748-1053
- Counseling .....704-748-1051

**EAST CAMPUS .....704-825-3737**

# CAMPUS MAPS, PHONE NUMBERS



*15,000 copies of this publication were printed at a cost of \$1.56 each.*







# Gaston College

Opportunities For Life

**DALLAS CAMPUS**  
201 Hwy. 321 South  
Dallas, NC 28034

**LINCOLN CAMPUS**  
511 South Aspen Street  
Lincolnton, NC 28093

**EAST CAMPUS & TEXTILE TECHNOLOGY CENTER**  
7220 Wilkinson Boulevard  
Belmont, NC 28012

[www.gaston.edu](http://www.gaston.edu)